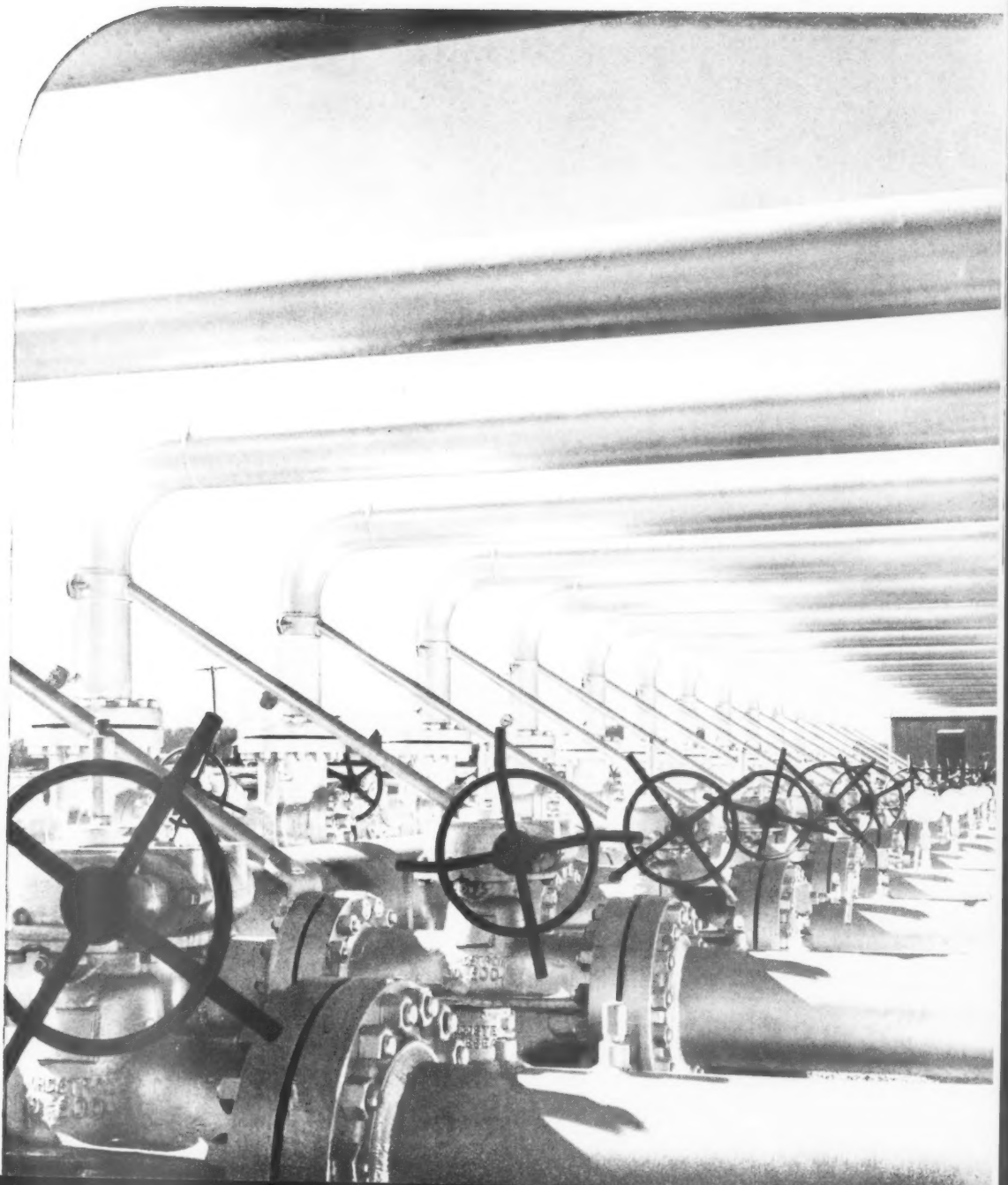


AMERICAN GAS ASSOCIATION

MARCH
1959



LOOK WHAT GAS IS DOING NOW!

Look at the new ROPER
Gas Range—awarded this
Gold Star



*World's Newest
Emblem of Excellence*

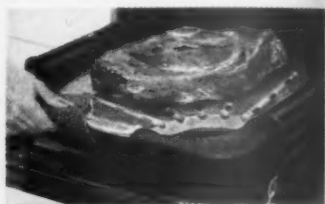
Only the finest ranges from the world's great Gas Range Makers qualify for this coveted Gold Star Award. Below are just a few of the more than 28 advances in performance, automation and design a range must have to meet new Gold Star Standards. No wonder now, more people than ever will be cooking with Gas!

Faster, cooler, cleaner cooking than ever before!

CABINETS BY WOOD-MODE KITCHENS



4-WAY WONDER! Roper's radiant-heat Rotis-O-Grill works 4 ways: as a rotisserie, with meat thermometer for center spit; as a vertical broiler; as a spatter-free griddle; as work surface. Fast all ways *because it's Gas!*



FAST, FLAVORFUL! Great meat cookery and a Gas flame just naturally go together! This Roper broils steak to a turn—with the broiler door shut, of course. *No heat's wasted—no time's wasted—and the steak stays juicy, tastes great!*



FULLY AUTOMATIC! Burner-with-a-Brain® on this Roper is thermostatically controlled—turns flame up or down as needed *automatically*. Faster, cooler too, because it's Gas . . . no warm-up wait, no hang-over heat!

YOUR WISEST BUY IN RANGES is the range with a proud new Gold Star. You get all the natural advantages of Gas . . . economy, efficiency, dependability. Then you get all the new advantages of design, automation and performance that the Gold Star stands for . . . advantages that make these ranges pace-setters for the entire industry. *Don't buy any range until you've seen ranges built to new Gold Star standards—at your Gas Company or dealer's now.*

AMERICAN GAS ASSOCIATION



ROPER

ONLY GAS  does so much more...for so much less!

*A.G.A. Mark © Am. Gas Assoc., Inc.

This Roper Gold Star ad is the first in a series of A. G. A. ads to appear in national magazines. All major gas range manufacturers participating in the Gold Star program will be given similar treatment



Compressor installations help speed natural gas to market. C. H. Collier, Texas Gas Transmission Corp., submitted photo

THE "Methane Pioneer," a sleek 5,000-ton dry cargo ship, slipped into England's Carvey Island on the River Thames last month with a cargo aboard that may add another bright chapter to gas industry history. The epic-making voyage brought 32,000 barrels of liquefied methane to England—a start toward replenishing Great Britain's diminishing natural gas supply. It was the first delivery of liquid methane ever to be made across the ocean. Details are on page 2. . . . The A. G. A. Pipeline Research Committee is sponsoring a program to develop techniques for the use of radioactive tracers. (See page 4.) The program will aid in determining pipeline extension design and also will enable technicians to discover the state of deterioration in the line. . . . From Hollywood comes the report that gas appliances continue to be placed in movies and TV far more than competitive appliances. And although movie production was down 30 per cent in 1958 from the previous year, placement of gas appliances in Hollywood films actually increased. For a report on movie stars and appliances, see page 6. . . . Good news for many gas utilities is reported in this issue. Although A. G. A. has stepped down from its role as sponsor of the Mrs. America contest, gas companies will nonetheless be able to continue in this vital promotion. For a report on new arrangements, turn to page 9.

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Methane Pioneer docks in England

A team of seven American and British engineers and 29 British seamen made history on Feb. 20 when the converted dry cargo ship, the "Methane Pioneer," slipped into England's River Thames and docked at a terminal on Canvey Island between London and Southend. Aboard were 32,000 barrels of liquid methane.

The completion of the highly successful three-week maiden voyage from Lake Charles, La., the first trans-ocean delivery of liquid natural gas in history, was announced by Sir Harold Smith, chairman of the Gas Council of Great Britain, and E. F. Battson, New York, president of Constock International Methane, Ltd.

"Success of the first voyage of the 'Methane Pioneer' marks the beginning of an era when gas for use as domestic and industrial fuel can be made available to energy-deficient countries throughout the world," Mr. Battson said.

"In some parts of the world natural gas is a wasted natural resource," he added, "and the success of this program to transport it in the form of liquid methane is a tremendously significant technical achievement and a boon to the economy of many countries."

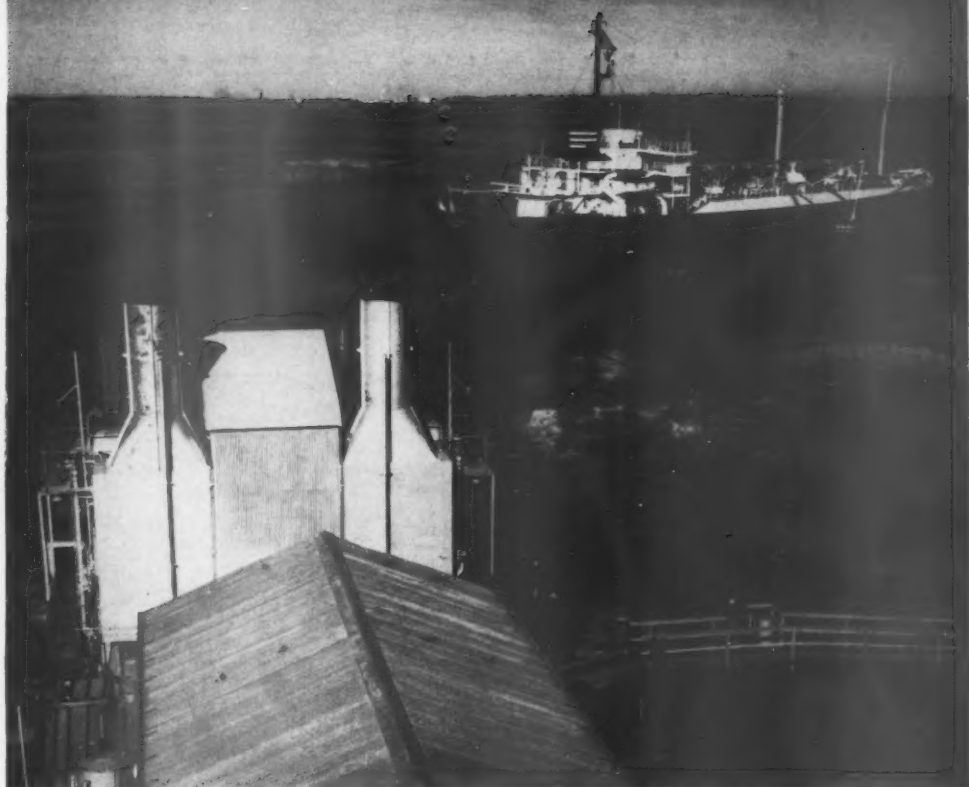
The 5,000-ton "Methane Pioneer" is owned and operated by British Methane, Ltd., a Bahamian corporation formed by

the Gas Council of Great Britain and Constock International Methane, Ltd. Constock, which is owned jointly by Union Stock Yard and Transit Co. of Chicago and Continental Oil Co., Houston, Texas, has been engaged in research and development work on the project for more than five years.

Methane is the principal component of natural gas and liquefies at minus 258° F. When liquefied, methane has the characteristic of reducing one six-hundredth in volume. It is impractical to hold large amounts of methane as a liquid under pressure, and scientists for years have been studying methods of transporting liquid methane without pressure at the extreme cold temperatures.

The system developed by Constock research and now used in the "Methane Pioneer" requires special aluminum tanks installed in insulated holds of the ship within which the liquid methane is carried without pressure and at 258° below zero. Constock has a strong patent position, which has been established during several years of development work.

"British Methane, Ltd., has spent in excess of \$5 million on the ship," said Mr. Battson, "while Constock has an investment of approximately \$5 million in the pilot liquefaction plant and terminal at Lake Charles, from which the gas for the test trip is being supplied. In addition, the North Thames



The "Methane Pioneer" is seen from atop the liquefaction plant which manufactures some 1,500 barrels of liquid methane daily

*History-making voyage marks first time
for the delivery of liquid methane across the ocean;
called 'prelude to new era for natural gas'*

Gas Board has spent about \$1 million for a terminal at Canvey Island and reforming facilities at their Romford gas works near London."

At Canvey Island, the liquid methane is being transferred from the ship to storage tanks. It will subsequently be vaporized to gas under pressure, and delivered by direct transmission to the reforming plant. It will be mixed with refinery off-gases, and the mixture will then be reformed to town gas and delivered to the North Thames Gas Board's consumers in the London area.

The history-making ship is managed and operated by Stephenson Clarke, Ltd., London, the largest fuel-shipping organization in the United Kingdom. Founded 230 years ago, this firm owns or manages 105 ships. Coincidentally, the first Stephenson Clarke ship sailed in 1730 from England to the Louisiana Territory, the same area from where the "Methane Pioneer" embarked for Canvey Island three weeks ago with its historic liquid methane cargo.

The crew of the "Methane Pioneer" was selected by Stephenson Clarke. Most are "Tynesiders" from the Tyneside area near Newcastle on the Northeast coast of England, the home of what the British call the "best sailors in the world."

Aboard the "Methane Pioneer" is also a test crew of British

and American engineers who are making the various scientific measurements related to the cargo tanks, insulation and cargo itself, in order to determine behavior under ocean conditions. The Britons aboard ship are Philip Arthur, engineer for Stephenson Clarke, Ltd., and Dennis Rooke, engineer of the South Eastern Gas Board. Americans aboard are Carl L. Ritter, manager of operations for Constock, Lake Charles; James W. Hunt, design engineer for Constock in New York; John A. Kenney, Constock's instrument engineer; W. D. Thomas, naval architect of the J. J. Henry Co., Inc., architectural firm in New York; and Frank Brooks, research engineer with Arthur L. Little, Inc., Cambridge, Mass.

The master of the "Methane Pioneer" is Captain J. T. Gibson, a sea captain with 20 years of service with Stephenson Clarke, Ltd. He is a native of the Tyneside area, but is now a resident of London.

The "Methane Pioneer" was scheduled to begin its three-week return voyage to Lake Charles after about a 10-day stay at the Canvey Island terminal. This ship is merely a prototype of larger vessels to be used in liquid methane service, and is expected to make only a few trial runs to England carrying liquid methane, in order to demonstrate practicability of the trans-oceanic shipment of low temperature liquids by tanker.

Radioactive tracers determine gas flow



IGT personnel lower tracer into injection equipment. Geiger counter checks for radioactivity

*A. G. A. research program will aid
in determining pipeline extension design; show
the state of line's deterioration*



Heavy lead cases are used to transport the tracer. White, of short half-life, tracer was flown to site just prior to a stop w

To provide the gas industry with a new tool which will accurately determine pipeline flow, the A. G. A. Pipeline Research Committee is sponsoring a program to develop techniques for the use of radioactive tracers.

The actual development was accomplished by the Institute of Gas Technology, and the first test was run in cooperation with Panhandle Eastern Pipe Line Co. on a section of line in Illinois.

The accurate determination of flow will aid greatly in proper design of pipeline extensions or new facilities as well

A final check with the Geiger counter is made after installation of tracer in order that technicians can be sure that tracer is in place to detect





White, superintendent of Panhandle Eastern Pipe Line Co., a stop watch to time the rate of injection into gas stream



Technicians anticipate the arrival of the radioactive tracer. Shown above are the scintillometer and radioactive counter with magnetic tape recorder. Future field tests are planned

as give an indication of deterioration of the pipeline, the committee reports. Both are tremendous economic factors.

The test began with the injection of a small vial of radioactive Argon⁴¹ into the flowing gas stream. The time of injection was rated on a stop watch. At a downstream detection point, a sensitive radioactive detector revealed the arrival of the radioactive gas. The rate of flow of the natural gas in the pipeline was determined by charting the time it took for the radioactive material to reach the detection point.

Argon gas was used as the radioactive agent because its molecular properties will not permit radioactive contamination of substances it contacts. In addition, the radioactive half-life of Argon⁴¹ is so short the radioactivity decays and disappears in a few hours. Because of these properties, there are no health hazards connected with the tests.

The first field test, carried out with the simultaneous use of Argon and ammonia tracers and orifice metering, was successful. All the mechanics were successfully carried out and the information

obtained was good. The committee reported there was only a negligible difference between the calculated flow efficiencies when using ammonia or Argon⁴¹.

A battery of instruments, including a scintillometer and a radioactive counter equipped with magnetic tape recorders and recording graphs, was used to detect the tracer and measure and record the varying intensities of the radioactive gas as it reached the detection point.

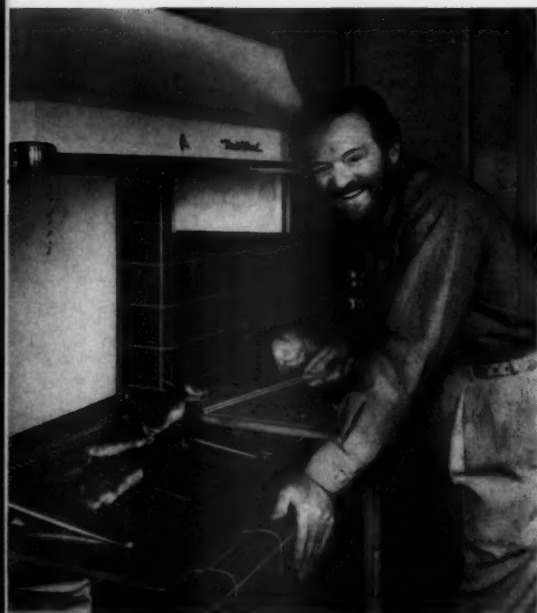
Several future field tests are now planned to determine the effects of pipe size and different detection times.

scintillometer is mounted on pipe at terminal point of the to detect radioactivity penetrating the walls of the pipe

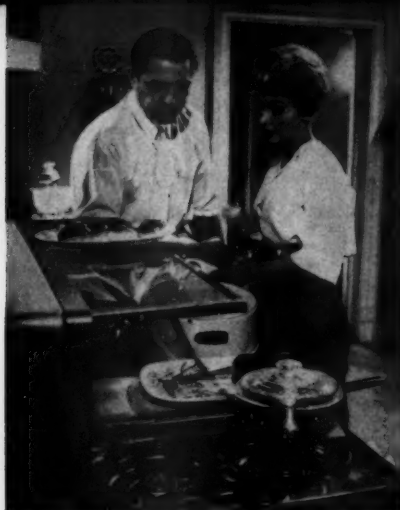


The tracer is injected into natural gas stream by high pressure nitrogen. Committee's research program was designed to develop techniques for the use of radioactive tracers





Van Heflin whips up some tasty steaks on the Char-Glo broiler in his all-gas kitchen, one of the main attractions in his home



Steve Cochran and Fay Spain prepare dinner with gas in M.G.M.'s "The Beat Generation"



Martha Hyer adjusts her gas oven in Universal-International's "My Man Godfrey" starring Andy Hardy



Billie Burke appears with a gas range in national TV spots filmed at M.G.M. studios



Spring Byington, star of TV's "The Bride," takes dinner from the gas oven in the picture

Gas appliances continue top role in movies, TV

Gas appliances were seen by millions of motion picture and television fans during 1958, according to a report by the A. G. A. Hollywood Bureau.

Although motion picture production during 1958 was 30 per cent lower than during 1957, placement of gas appliances in Hollywood films during the past year increased since 1957.

H. D. Nicholson, Hollywood Bureau manager, reported that gas appliance and all-gas kitchens and laundries appeared in 55 movies during 1958, as compared to 52 in the previous year.

Films giving gas a better-than-average break were *Shaggy Dog*, starring Fred MacMurray; *The Last Angry Man*, star-



Ray Holden checks the food in the gas oven in "Andy Hardy Comes Home," an M.G.M. film



Patricia Breslin and Jackie Cooper, stars of "The People's Choice," one of television's leading filmed series, enact a scene in the all-gas kitchen which serves as a set for the show



Rhonda Fleming admires her new O'Keefe and Merritt combination washer and gas dryer



June Allyson prepares lunch for her family in the beautiful and modern all-gas kitchen in her Brentwood, Calif., home. June's home was recently redecorated with new gas appliances

ring Paul Muni; *Man in the Shadow*, starring Orson Welles; *The Mating Game*, starring Debbie Reynolds; *End of the World*, starring Harry Belafonte; and *Rally 'Round the Flag, Boys*, starring Joanne Woodward.

Some 80 weekly television shows were filmed in Hollywood during 1958, and, of the shows using kitchen scenes, nearly all used gas appliances. Many shows had occasional appearances of gas appliances, while others showed gas equipment almost every week.

Some shows using gas appliances regularly are *The Donna Reed Show*, *December Bride*, *Fury*, *The Bob Cummings Show*, *The Loretta Young Show*, and

The People's Choice.

Hundreds of TV spots used gas appliances for selling products and services. There were 1,423 television commercials, TV shows, and national ads showing gas appliances. All appearances of gas appliances in movies and on TV were arranged by the Hollywood Bureau.

Some products using gas appliances in commercials are Miller's Beer, Pillsbury Products, Kaiser Aluminum, Kellogg's Cereals, Betty Crocker Mixes, Carnation Milk, Procter and Gamble Products, Johnson's Wax, Kraft Cheese, and Tide Detergent.

Mr. Nicholson pointed out that, in addition to the initial showing of TV

films and commercials, there is the additional value of re-runs. Many TV shows experience at least one re-run, and commercials usually are shown several times.

In addition to placing all the gas appliances before movie and TV cameras, the Hollywood Bureau was active in other areas. The Bureau coordinated set construction and preliminary work with Warner Brothers Studio, in connection with the Fred MacMurray-June Haver "White Christmas" promotion. It also contracted for, and supervised, the remodeling of the MacMurray home's kitchen and laundry, featured in a re-

(Continued on page 10)

14th Research and Utilization conference set for May 5-7

The latest in gas industry technical advancement will be revealed when industry leaders meet at the 14th annual A. G. A. Research and Utilization Conference. This meeting, the only national conference in the domestic research and utilization fields, will be held at the Hotel Carter in Cleveland, May 5-7.

Sponsored by the Committee on Domestic Gas Research in conjunction with the Utilization Bureau, this PAR activity is a highlight of the domestic research program. Technical, executive and sales personnel of both manufac-

turers and utilities will find this conference interesting and stimulating.

G. M. Nash, utilization engineer, Central Hudson Gas and Electric Corp., will be chairman.

Joe C. Darrow, vice-president, Lone Star Gas Co., heads the Committee on Domestic Gas Research.

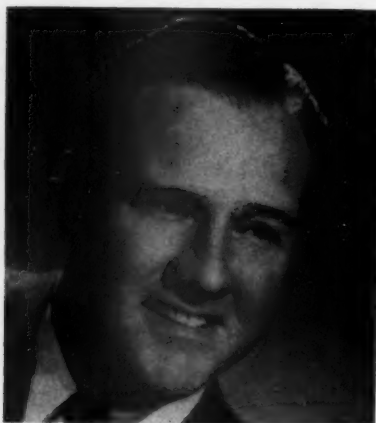
Research advances as well as manufacturer progress in gas air conditioning will be reviewed, and the new A. G. A. research prototype cooking appliance will be demonstrated.

Prominent utility and manufacturer

executives will address the luncheon functions. In addition, formal papers and a clinic discussion will be presented. Several papers are planned on gas incineration, including the analysis of effluents. Energy transformation via thermionic means will be discussed. Pilot service problems, burner research, water heater cathodic protection, similar studies of house heating installations, and other late research developments will be explained.

Additional details will appear in the April issue of the A. G. A. MONTHLY.

Meet your Association staff



Raymond B. Cooper

Among other things, Raymond B. Cooper is an expert on Southern hotels. Ray should know the good from the bad. As Southwest regional manager for A. G. A., he travels through 15 states to call on all member gas companies and appliance manufacturers. His territory—the same area encompassed by the Southern Gas Association—keeps him on the road constantly.

Ray, one of four A. G. A. regional managers, serves as the liaison between A. G. A. and the gas industry in the Southeast and Southwest. His job is to create a closer relationship between the Association and the industry, to keep companies informed of Association activities, and, equally as important, to keep the Association informed of activities in the field.

For that reason, Ray is probably as well acquainted with the gas industry in his territory as anyone in the business. He visits daily with company chairmen, presidents, sales managers, promotion and advertising people, and others in responsible positions.

His reports are received by Headquarters at regular intervals. It is this personal contact that makes the Association's successful operations possible.

Ray was well prepared for his job as Southern regional manager. After studying business administration at Southern Methodist University, he began selling appliances retail in 1937.

In 1940, he became associated with the Lone Star Gas Co. in Dallas as multiple housing salesman on all gas products. Following service during World War II ("I fought the 'battle of Fort Worth' from 1942-46 as a master sergeant flight engineer at the Fort Worth B-24 pilot training center"), Ray joined Servel, Inc., as a specialist in sales training and promotion of gas products in a five-state area.

In 1950, Servel promoted Ray to district manager with headquarters in Oklahoma City; in July 1956, he resigned to join A. G. A.

Besides his regular travel schedule, Ray attends SGA round-table discussions, A. G. A. meetings in the Southern region, and a number of national A. G. A. conferences.

Despite much travel, he manages to spend time with his wife, Dorothy, and daughter, Mariann, at home in the University Park section of Dallas. He is active in the Dallas Masonic Lodge 1179, and is a member of the Lovers Lane Methodist Church.

His hobbies are bowling, golf, and hunting, and Ray likes nothing better than a trip into the field for some good bird shooting. He admits he is no pro in golf and bowling, and declines to reveal his score for either sport.

But he did give this hint: "Now if my low bowling score was my golf score, and my high golf score could only be my bowling score. . . ."

'Mrs. America' stays in industry

*New arrangement
permits gas utilities
to enter promotion*



The national Mrs. America contest, a search for the nation's outstanding homemaker, will continue as a gas industry promotion this year.

In a colorful, eight-page brochure recently mailed to gas companies by Hansell Hillyer, Inc., the new arrangements making it possible for gas companies to participate in the 1959-60 program are explained.

Page 2 of the booklet carries a statement by James O'Malley, Jr., a partner in the law firm of LeBoeuf, Lamb and

Leiby, New York City, addressed to gas companies as follows:

"As president and owner of Hansell Hillyer, Inc., Hansell Hillyer has completed a series of contracts between Mrs. America, Inc., Bert Nevins, its owner, and Whirlpool Corp., which:

"(a) Makes 'Whirlpool' the major sponsor of the forthcoming Mrs. America Contest (1959-60), and obtains for 'Whirlpool' an option through July 1959 to acquire 'Mrs. America, Inc.' outright by purchase of all its shares.

"(b) Places on Hansell Hillyer, Inc., the burden of securing sufficient gas company participation to justify Mrs. America, Inc., and Whirlpool in continuing the program as a vehicle for gas promotion, and confers on Hillyer, as president, the same veto rights as to sponsorships, contest judges, etc. that for the past five years, on behalf of the American Gas Association, has been alternately exercised by Hillyer and William Selzer of The Columbia Gas System, Inc.



Hansel Hillyer has been named non-salaried chairman of the board of Mrs. America, Inc.

"(c) Has seated Hansel Hillyer as non-salaried chairman of the board of Mrs. America, Inc., until July 31, 1959, for the express purpose of his being provided by operating management of Mrs. America with continuous firsthand knowledge of its affairs; it being understood that his position therein is primarily representative of gas industry interests.

"(d) Has secured agreement to hold Fort Lauderdale coronation finals between June 11 and June 23, five weeks later than as scheduled in the past five years, and has secured substantial reductions in entrance fees by Mrs. America, Inc., for gas company sponsors in less populated states. (In no state will such charge exceed those heretofore made by A. G. A.)

"While there are necessarily some differences in the two contracts, arising principally out of the changed parties, changed circumstances and lapse of time, it appears that the acts to be performed, and the rights and protections granted by Mrs. America, Inc., in the draft of the contract we have examined are substantially similar to those provided for

and granted in Mrs. America, Inc.'s, contract of Nov. 11, 1954, as amended, with A. G. A."

Hansell Hillyer has been identified with the Mrs. America program since 1954, the year it became a gas industry promotion under A. G. A. sponsorship. He served as chairman of the Mrs. America Committee in 1954, 1955 and 1958. He is chairman of the board of South Atlantic Gas Co. The company has conducted a local contest every year from 1954 with excellent results.

In addition, Mr. Hillyer is well versed in gas industry affairs, having devoted 30 years to the public utility business. He is the only gas industry executive serving simultaneously as a director of A. G. A. and as a member of the PAR and General Promotional Planning Committees. He is also a member of A. G. A.'s National Gas Industry Television Committee and the General Convention Committee, and is a life member of the Executive Committee of the Southern Gas Association.

In September 1958, the General Promotional Planning Committee voted to discontinue the Mrs. America contest as an A. G. A. activity, when the Association was unable to purchase the program outright from Mrs. America, Inc.

In October 1958, Mr. Hillyer was urged to find a way which would make it possible for gas companies to continue participation in the Mrs. America promotion with the same rights and protections previously afforded by A. G. A.

After long weeks of negotiations, Mr. Hillyer succeeded. First announcement of the new arrangements was made by telegram in November, and then by a letter to industry executives.

Response was immediate. Gas companies in 25 states, representing three-fourths of the total population, signed up for this year's contest.

Every sponsor from last year, except Singer, has re-signed and, in addition, Johns-Manville, Lever Brothers and

Whirlpool Corp. will be sponsors.

Other sponsors are The Gorham Co., Robertshaw-Fulton Controls Co., Wilson and Co., West Bend Aluminum Co., Standard Brands, Inc., Best Foods Division of Corn Products, Inc., The Hammond Organ Co., Glamorene, Inc., The Toni Co., Culligan, Inc., *Parents' Magazine*, The City of Ft. Lauderdale, U. S. Treasury Department Savings Bond Division, and gas utility companies.

Highlights of the 1959-60 Mrs. America Program as outlined in the Mrs. America brochure include:

New dates for local, state and national finals.

Fees the same or lower for gas company participation.

A Mrs. America Exhibition Home to be built in Ft. Lauderdale prior to the national finals.

A \$50 per diem rate for the gas company sponsoring the ultimate new Mrs. America, plus two free personal appearances by her.

A special rate of \$100 per diem for gas companies combining to contract for 25 personal appearances of the new Mrs. America.

First rights to personal appearances and endorsements of state winners and the new Mrs. America for all participating gas companies.

On the back page of the brochure is reprinted a telegram to Mr. Hillyer from A. G. A. President J. Theodore Wolfe, which reads:

"The new Whirlpool-Hillyer-Mrs. America arrangement for 1959 sounds excellent. It can occasion no expense to non-participating companies and will provide for continued participation by gas industry units who have been in the program, and like it, and wish to go ahead with it.

"More importantly, it preserves the whole program as a vehicle for gas promotion."

Movies, TV

(Continued from page 7)

cent issue of the A. G. A. MONTHLY.

The Bureau continued its policy of mailing publicity, photographs and advertising material weekly to all subscribing companies of *Playhouse 90*.

The Bureau also coordinated the Mrs. America contests for the states of Oregon, Utah, Nevada, and Washington.

Assistance was given to the national finals.

In the field of publicity, 226 photographs, with captions and stories, were released to manufacturers, trade magazines, member gas companies and associations during 1958.

The Hollywood display board "Pictures of the Month" service, now in its eighth year, featured such stars as Doris Day, Van Heflin, Jackie Cooper, Betsy

Palmer, Ida Lupino, Howard Duff, Billie Burke, June Haver, and Fred MacMur-ray.

A promotional tie-up with Bob Hope and Jerry Colonna was arranged for a closed-circuit, regional TV show to RCA Whirlpool dealers.

The Bureau also found itself in the appliance-sales business, when it sold more than \$12,000 worth of gas appliances to personnel.

Gas paves the way to good health

Hot and appetizing meals on wheels, cooked by natural gas, help patients at the new Fisher-Titus Memorial Hospital in Norwalk, Ohio, back on the road to better health.

A combination of modern kitchen equipment and unusual hospital building design makes successful "meal wheeling" possible.

Built at a cost of nearly \$2 million, the hospital is a one-floor plan, brick and concrete structure which spreads over nearly eight acres of ground. It has 101 patient beds, including 24 bassinets for babies in its pediatrics department.

Some 100 feet away and connected by an underground tunnel is a smaller building which houses five gas-fired boilers for heating, the air conditioning mechanism, and an emergency power unit.

Serving an installation of this size with meals on wheels might seem impractical at first thought, but it has worked out well since the hospital opened late last year. The equipment-building design combination—plus efficient personnel, of course—is the answer.

Mrs. Charlotte Dobbs, hospital dietitian, says she emerged "from mothballs" to direct activities in this shiny new kitchen.

Mrs. Dobbs is pleased with the gas equipment which has been provided in the Norwalk hospital kitchen. There is a Garland battery consisting of a broiler, two deep-fat fryers and two hot top sections. This battery is placed back-to-back with three Blodgett decked bake ovens, a Blodgett cook's stove, a 30-gallon soup kettle, and a three-door steamer.



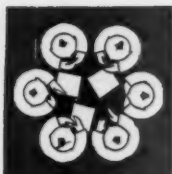
Hospital Administrator William Slabodnick (l.) and N. B. Almendinger, Norwalk manager for The Ohio Fuel Gas Co., inspect grounds at the community's new memorial hospital



Mrs. Charlotte Dobbs cites aid given by Ohio Fuel. Inspecting new kitchen are (l. to r.): Mr. Almendinger, Mrs. Kay Brinker, Mrs. Dobbs, and L. J. Moore, of Ohio Fuel



Between-meals lull allows kitchen staff to prepare for the next meal. Long steam table at left provides for quick serving of hot food with "meals on wheels" carts



Industrial relations round-table

Prepared by
A. G. A. Personnel Committee

Edited by W. T. Simmons

Assistant Personnel Manager
Philadelphia Electric Co.

● **How to enjoy your job**—One of the key findings of a study in *Nation's Business* on executive job satisfactions is this: the things which make an executive happier in his job may also be the things which make him more productive. One top management psychologist suggests these steps, if you want to shoot for both targets:

- (1) Make your main challenge not the managing of the business, but the managing of people.
- (2) Think about what you will do to guide your company's destiny, and then let your subordinates decide how it will be done.
- (3) Make a habit of asking yourself what you are worrying about; don't let anxieties build up.
- (4) Give subordinates every opportunity to measure and judge themselves; their self-confidence will make your work easier and more effective.

● **Key work force problems in 1959**—The most challenging problem for supervisors in 1959 will be the increasing complexity of human relations. In the past, we have paid a lot of attention to supervisor-employee relationships, and we have made much progress in improving them. Despite these achievements, 1959 may be the year when this problem becomes the make-or-break factor in management progress.

That is the conclusion drawn by Glenn Gardiner, nationally known authority on supervision. The conclusion is based on the replies of 961 supervisors in 150 companies to a survey recently conducted by *Management Information*, a Mt. Vernon, N. Y., news service for supervisors.

"Nine out of 10 supervisors feel that if they can maintain good human relations this year, they will be in the best position to handle other problems," Mr. Gardiner told *Factory* editors. "Foremen realize that the immediate pressure will be for tighter cost control, improved quality, intensified maintenance, better customer service. But they are also more aware than ever that they must achieve these results through people."

Human relations is the common denominator of this year's supervisory problems, the survey shows. But analysis splits this generalization into five hard nuts to crack:

1. **Sluggish attitudes**—Of the supervisors polled, 43 per cent named employee motivation as the toughest problem to be faced. Many supervisors seem to want to learn more about psychology, and most of them express a need for specific techniques on how to motivate. The survey gives little evidence of a desire to "crack down." Mr. Gardiner's conclusion: Supervisors are not

bucking the trend to better understanding of individuals. They, too, want to understand the employee's viewpoint and to win his cooperation by effective leadership.

2. **Group resistance**—Many supervisors (57 per cent) see "teamwork as the best way to improve work output per man-hour." These supervisors are beginning to speak up about the power of employee groups to aid or hinder production.

Mr. Gardiner's conclusion: Supervisors want help in this area. They have found that cooperation is long-term, and cannot just be won overnight by lip service. They are looking for more conclusive ways to show employees the relationship of cooperation with company gains and worker welfare.

3. **Strangled communications**—Of the respondents, 84 per cent say on-the-job communications will be more important this year. The survey shows again and again that foremen want to improve their man-to-man contacts. "Tailboard conferences before each job pay off in job understanding and safety," says a maintenance foreman in Ardmore, Okla.

Mr. Gardiner's conclusion: Employee communications may be an overworked phrase, but this situation should not block its effectiveness. He quotes a supervisor in Erie, Pa., who jotted this note on his questionnaire: "Communicate! Communicate!"

4. **Half-baked performance**—The majority (74 per cent) of the supervisors checked the problem of keeping costs down; 60 per cent noted keeping quality up; 31 per cent mentioned better customer service. Summarizing the key problem in these terms, 61 per cent called for improving employee performance.

Mr. Gardiner's conclusion: The supervisor's real job is to assure a full day's work for a full day's pay. To hold costs in line, he is asking for more help from higher management in setting realistic goals, adapting better instruction techniques, and applying firmer controls.

5. **Reluctant supervisors**—Mr. Gardiner concludes from the survey that, while supervisors are essentially management-minded, they want—and don't always get—closer participation with higher management. Conversely, although higher management wants to include supervisors as bona fide associates, these supervisors are criticized and doubted because of their reluctance in many instances to assume managerial responsibilities.

This questionnaire was distributed by Elliot Service Co. (publishers of *Management Information*) to 10 supervisors in each of 150 diversified manufacturing companies throughout the country. Of the supervisors to whom these anonymous questionnaires were delivered, 64 per cent responded. An executive in each of the 150 companies filled out a similar questionnaire. Mr. Gardiner reports a high degree of correlation

between supervisory and executive replies.

● **NLRB rulings**—The National Labor Relations Board ordered both the company and the union to return an employee's union initiation fees and dues because the employee's discharge had been based on an illegal hiring-hall clause.

The union contract, which had been negotiated by a Teamsters Union local and the Los Angeles-Seattle Motor Express Co., included this procedure for hiring casual workers: "The employer shall first call the union or the dispatching hall designated by the union for casual help. In the event the employer is not notified that such help is not available or in the event the employees called for do not appear for work at the time designated by the employer, the employer may hire from any other available source."

The worker in question—armed with a letter signed by a union officer saying that he could work in the freight industry without going through the union hall—applied for a job, and was hired as a casual worker. The company presumed that the union had waived the casual-employee hiring-hall clause. The union subsequently objected, and demanded that the employee be fired as a casual worker unless he subjected himself to the hiring-hall procedure. The company fired the employee until such time as he could clear up the matter. The employee did so, very effectively, by going to the NLRB, which ruled the hiring-hall clause illegal because it does not make these provisions:

1. Selection of applicants for referral to jobs shall be on a non-discriminatory basis.
2. Selection of applicants shall not be based on, or in any way affected by, union membership, by-laws, rules, regulations, constitutional provisions, or any other aspect or obligation of union membership, policies, or requirements.
3. The employer has the right to reject an applicant.
4. The parties shall post notices as to the hiring arrangements and the NLRB safeguards.

● **More NLRB rulings**—In a hearing before an NLRB trial examiner, the Animated Film Producers Association succeeded in establishing that a \$250 initiation fee was excessive.

The NLRB upheld its trial examiner, concluding that the union's purpose in increasing the initiation fees from \$50 to \$250 was to discourage job applicants and, thus, to have a closed shop. The starting pay for animators was \$50 per week. A great many came straight from high schools and art schools, and the turnover was great. It was obvious that \$250 was a high price for such a person to pay for a job. The NLRB ruled that all initiation fees in excess of \$50 had to be returned.

A.G.A. in Action

Thumbnail sketches of current activities at Association Headquarters and Laboratories

The Marketing Research Committee, at its Feb. 18 meeting in Detroit, approved a new chapter on the "Design of Questionnaires for Personal Interviewing" for the *Marketing Research Handbook*. The committee also discussed the forthcoming chapters on "Sales Compensation and Quotas" and "Sources of Data for Area Economic Indicators."

A. G. A. Managing Director C. S. Stackpole was one of five participants on Feb. 15 in a cross-country telephone discussion of the merits of natural gas versus solar energy versus nuclear energy as the best future source of power for Florida. An edited version of the taped conversation will be one of the leading articles in the 75th anniversary edition of the *St. Petersburg (Fla.) Times*, to be published later this year. Besides Mr. Stackpole, who talked from New York City, were W. H. Zinn, president, General Nuclear Engineering Corp.; John I. Yellott, chairman, Solar Energy Committee, American Society of Mechanical Engineers; W. J. Clapp, president, Florida Power Corp.; and Seymour Henck, public relations and management counsel in the nuclear energy field.

Nine "Accident Prevention Through Informed Supervision" courses have been planned so far for 1959. The dates and locations of these courses are April 28-29, Atlantic City, N. J.; May 6-7, Lincoln, Neb.; May 11-12, Minneapolis, Minn.; June 3-4, Albuquerque, N. M.; June 9-10, Santa Barbara, Calif.; June 17-18, Charlotte, N. C.; July (date to be set), Charleston, W. Va.; July 28-29, Wichita, Kan.; Aug. 4-5, Chicago.

The Gold Star promotion kit, which contains pictures, descriptions, and ordering information on 21 Gold Star items ranging from the Gold Star movie at \$500 a print to Gold Star stickers at one cent apiece, has been mailed to companies throughout the industry.

The Steam Generation and Water Heating Committee's task force, at its Feb. 10-11 meeting in Columbus, Ohio, approved the revision of "Enough Hot Water—Hot Enough." This will appear as a reference section in the May 1959 edition of *Air Conditioning, Heating and Ventilating* magazine.

The Air Conditioning and Heating Committee, Industrial and Commercial Gas Section, will soon issue an information letter entitled *How To Sell GAS to GSA*. The letter, No. 97, describes the gas industry's opportunity to obtain business from the General Services Administration, which is currently involved in an extension program of air conditioning many

of its existing federal buildings and almost all of its new structures.

An A. G. A. commercial gas cooking promotion booklet has been published in a French translation. Entitled *What Is Factual—What Is Fictional?* the booklet is a question-and-answer treatment of the facts and fictions in the claims of competitive fuels.

Will atomic energy cut into the natural gas market? "It appears improbable," says the new edition of *Gas and the Atom*, an eight-page question-and-answer booklet issued by PAR Public Information. Atomic energy looks like a good thing for all of us, states the booklet, "because it will share the work load with natural gas, oil, and coal."

The General Promotional Planning Committee has approved the "Blue Star Home" program. A mailing on this program was made Feb. 16, and a number of gas companies already have announced their intentions of participating. The purpose of this industry-wide program is to gain for gas a greater share of the new home market.

The New Freedom Gas Home Bureau is currently mailing to utilities information on various consumer magazine builder promotion programs, in an effort to encourage the companies to have their builders cooperate with the magazines, with a view toward possible editorial coverage of the homes.

R. I. Snyder has been named chairman of the Approval Requirements Committee. He succeeds the late George B. Johnson. Mr. Snyder is executive vice-president of Southern California Gas Co. He also has been named chairman of the ASA Sectional Committee, Project Z21, A. G. A. Approval Requirements Committee. Mr. Snyder joined Southern California Gas Co. in 1935, following employment with the A. G. A. Laboratories in Cleveland.

Mrs. Edith W. Finch has been named librarian at A. G. A. Headquarters. She is a graduate of the University of Pennsylvania, with a master of arts in history. She also has a degree in library science from Drexel Institute in Philadelphia. Mrs. Finch comes to A. G. A. from Temple University, where she was head of the university's business library in Philadelphia for 13 years. She also was employed for two years as a cataloger with the United States Budget Bureau in Washington. Her goal at A. G. A.: To make the library a service unit of usefulness to the Association staff, Association members, and the industry.

Home Service ready for challenge



The welcoming luncheon on Thursday included past Home Service Committee chairmen, and speakers: (l. to r., seated) Elizabeth S. Herbert, Gerald L. Andrus, Lucy Slagle, J. Theodore Wolfe, Vivian M. Beary, C. S. Stockpole, Mildred R. Clark and Thomas H. Evans; (l. to r., standing) Eleanor Wiese, Julia Hunter, Charles J. Sinnott, Flora Dowler, Gladys B. Price, Eleanor Morrison, Irene L. Muntz, Marjorie Chandler, Joe C. Darrow and Jessie McQueen. Luncheon speakers were Mr. Wolfe, Mr. Evans, Mr. Andrus, Mrs. Beary

The women of the gas industry are doing a tremendous job in the home service field, but they face an even greater challenge in the future, delegates to the 1959 Home Service Workshop were told. The annual meeting, sponsored by the A. G. A. Home Service Committee, was held Jan. 29-31 in New Orleans.

"Blueprints for Progress" was the workshop theme, and the male executives present came away confident that the gas industry's home service staffs are prepared to handle their future assignment.

Nearly 200 delegates from 35 states

and two Canadian provinces heard past progress and mapped an ambitious program for the future.

Their goals for 1959:

1. To uncover new business in the nation's rapidly expanding building program.
2. To keep abreast of new industry developments.
3. To continue the accent on youth in the field of home service.

Lucy Slagle, Home Service Committee chairman, and home service director, Atlanta Gas Light Co., presided at the opening session.

Gladys B. Price, staff supervisor, home service department, Southern California Gas Co., presented the keynote challenge when she told delegates to "Get Into the Builder Program." She described the customer as a "frustrated heroine" who often has no voice in her appliance purchases, because they "came with the home."

Miss Price advised home service to sell gas as the most modern, the best, and the most economical fuel for all uses. "We must cooperate with the new business section of sales, and contribute our know-how of appliances to a program that includes everyone in a posi-



Workshop speakers were (l. to r., seated) Sarah Sicker and Barbara Zeches, (l. to r., standing) Mrs. Laura Piepgras, Evelyn Gordon, Mary Lou Sills, Fred Endner and Jean Cox. The speakers discussed blueprints for success



Members of committees were (l. to r., seated) Katherine Krauss, Kathryn Ashcraft, Erline Moss, Alice Buell, Lolita Harper; (standing) Shirley McGillicuddy, Frieda Barth, Ida Lansden, Marjorie Chandler, Kathryn Heffernan, Louise Hanchey, and Hermine Foil



Some of the round-table groups at the Home Service Workshop discussed demonstrations and promotion of gas laundry equipment. Marjorie Bettsworth Jackson, Mich., led this group. There were four other such Workshop groups



Some of the Workshop delegates were (l. to r.) Lucy Slagle, chairman, Home Service Committee; Frances Welch, Emagene Burge, E. Ione Lankelma, Patricia Huff, Laverne Best, Jessie McQueen of A. G. A., Mrs. Vivian M. Beary, and Mrs. Martha McAllister

tion to influence the home buyer."

She added: "It is our obligation, and the least we can do is to see that builders, designers, architects, real estate people, and others in this field know something of the advantages of gas."

Mary Louise Bohn, home service director, Laclede Gas Co., said that her company sells the gas story to builders in the St. Louis area "with the aid of a simple, yet effective, dinner demonstration that is arranged by our new construction representatives." Most builders are in the process of launching new subdivisions, Mrs. Bohn said, and the dinner meetings, in which the many

features of modern gas ranges are demonstrated by home service, give Laclede the opportunity to sell these builders on the advantages of gas.

Elizabeth Sweeney Herbert, household equipment editor, *McCall's* magazine, entitled her topic "Homemakers Speak Up at Better Living Congress." Mrs. Herbert said that the second congress was as stimulating as the first, and that *McCall's* plans to make the event an annual affair.

She described in detail what women want in a home. It was interesting to note that most women attending the congress prefer to buy a home without ap-

pliances. "The majority wish to buy appliances from the manufacturer of their choice," she said.

Speaking on the role of natural gas in the home and industry, Patricia A. Huff, general home service director, The Ohio Fuel Gas Co., took delegates on a verbal tour of her state. Her subject: "Buckeye Briefs."

Miss Huff described the many products produced in Ohio and elsewhere which owe their existence to natural gas. The ladies were particularly interested when she said that "it may not be long before Americans will be wearing glass suits, dresses and coats." There is a new

field opening up in fiberglass—that of clothing. A study is underway to make fiberglass more durable by heat-treating the finished product, she said.

At the noon luncheon, Gerald L. Andrus, vice-president, New Orleans Public Service, Inc., welcomed the group to the city.

Luncheon speakers were Thomas H. Evans, vice-president, Equitable Gas Co., and chairman, A. G. A.'s Residential Gas Section; and A. G. A. President J. Theodore Wolfe, president, Baltimore Gas and Electric Co.

Entitling his talk "Green Light Ahead," Mr. Evans suggested that delegates determine where their field belongs in the management picture, and reminded them that management expects to make a profit. "Home economics is

homes set the pace, "and a pretty fast pace it is." He cited the rapid growth of the appliance business, and pointed out that appliances are going into new homes at the rate of 1,275,000 a year. "It's a well known fact that the competitive battle for fuels will be decided by what appliances go into these homes," he said.

The A. G. A. president stated that, in order to place gas appliances in new homes, we must first be certain that gas is readily available. One problem seen by Mr. Wolfe is the obsolete main extension policies "which too severely limit the amount of pipe that can be run free of charge to supply a new home." He said that an A. G. A. survey some years ago showed that 92 per cent of the new homes built within free main extension

maintain frequent contacts with architects and builders.

"This is where home service comes in, for you ladies have a vital role to play in helping to sell the home that features gas." Mr. Wolfe added that the home service representative must help the customer receive the maximum enjoyment from modern gas appliances.

Presiding at the Thursday afternoon session was Mildred Clark, home service director, Oklahoma Natural Gas Co. Speakers were J. C. Darrow, vice-president, Lone Star Gas Co., and chairman, A. G. A. Committee on Domestic Research; and M. D. Crawley, home planning director, Oklahoma Natural Gas Co.

Mr. Darrow employed a slide presentation to illustrate his topic, "Parade of



Dr. Virginia Miles talked about "Appliance Motivation"



Patricia Halloran vividly demonstrated Creole cuisine



Mike D. Crawley, Oklahoma Natural Gas

expected to do its share," he said.

Mr. Evans said that the rapidly changing markets, the increased trend in population, the fact that more women are working—which means more families will have more money to spend—all will influence the future course for home service representatives. "The period ahead is one of great promise and challenge," he said. "It will call for a continuous strong and competitive effort to solve the many problems of our industry. The home service representatives have the green light to help us solve these problems, and I am confident they will achieve our goals," he said.

Mr. Wolfe told delegates that new

areas used gas appliances for heating and other purposes; where main extension charges were required, however, gas entered only 49 per cent of the new homes.

Mr. Wolfe suggested that, in the future, our main extension policies be promotional, and that they be applied with an eye to what the future holds for our gas business.

Coupled with the need for a liberal main extension policy is the "even greater need for aggressive sales and promotional programs aimed directly at the new home market," he said. He suggested that every utility have at least one representative whose sole task is to

Gas Research." He said that some 250 gas industry representatives, from executives to technicians, comprise the guiding forces which select and supervise the research projects. "Thus, we have the reflection of many minds, rather than a few, on the needs of our industry," he explained.

Mr. Crawley, speaking on the subject "There's a Woman in the Kitchen," graphically described, with the use of unique window shade charts, designed to give dimensional effects, how the modern homemaker can best utilize her kitchen space. Mr. Crawley, an award winner in the kitchen planning field, said that even the smallest kitchen can

be "roomy" when properly arranged.

Discussion groups led off the Friday morning program, with laundry equipment, its promotion, and demonstration the theme of each group. Leaders were Miss Slagle, Irene L. Muntz, Marjorie Bettesworth, Eleanor Wiese, and Elsie Alcorn.

Immediately following was a symposium entitled "Blueprint Ideas." Miss Muntz, manager, home service department, Rochester Gas and Electric Corp., presided, and introduced the speakers, who were Evelyn Gordon, home service director, Metropolitan Utilities District, Omaha, Neb., "Carefree Care of Children's Clothing"; Mildred Endner, home service director, Minneapolis Gas Co., "The Why of a Laundry and Kitchen Planning Service"; Barbara Zeches,

ice, and the value gained through this activity, particularly as it was directed to purchases of combination washers and dryers. "We call on customers soon after they have purchased their laundry equipment, and make sure that the housewife knows the proper way to operate and care for the equipment," she said.

Using a flip-chart demonstration, Miss Zeches explained how United Gas promotes the twins—wash and wear, and the gas dryer. "The average woman's desire to rid herself of the chore of ironing has brought about our promotion of the wash and wear world of fashion," she said. United Gas helps to create interest in both wash and wear clothing, which requires little ironing, and the gas dryer.

Dr. Miles said that "good, sound mar-

ets, Gimmicks, and Gowns," meant the "so-called extras that become vital to the success of sales promotion and, in turn, home service programs." These extras include advertising and promotion specialties (gadgets), demonstration props (gimmicks) and demonstration dress (gowns). She described how these three are used by her company.

On Friday afternoon, delegates moved to the home service auditorium at New Orleans Public Service, Inc. Mrs. Vivian M. Beary, home service director of the company, presided. The afternoon program was highlighted by a "Creole Cuisine" demonstration by Patricia Halloran, home service adviser for Public Service. Miss Halloran, in just one hour and 15 minutes, gave a "magical" cooking demonstration of some of New Or-



then planning with Peggy Shaber



Mrs. Glenna Pierce of Norge describes a vertical broiler



W. F. Johnson of Hardwick shows a micro-wave broiler

home service director, United Gas Corp., "Wash and Wear World of Fashion"; Dr. Virginia Miles, vice-president, client services, Market Planning Corp., New York, "The Public Image"; and Julia Hunter, home service director, Lone Star Gas Co., "Gadgets, Gimmicks, and Gowns."

Miss Gordon described how her department, through a "laundry clinic," a promotion directed to young mothers, proved to them that the gas dryer is not just an indoor substitute for drying clothes, but the ideal way to dry children's clothing.

Miss Endner explained how her company organized a laundry planning serv-

keting and merchandising strategy must be consumer-oriented." All advertising, selling and servicing must begin and end with the consumer, if it is to be effective, she said. "If we know what the consumer wants and needs, the product itself can be designed for greatest acceptance, and the proper selling points can be singled out for emphasis," she pointed out.

Dr. Miles said that different kinds of research are needed to plan successful market strategy. "Motivation research is merely one of the tools of market research, not a be-all and end-all in itself," she said. "But it is a useful one when correctly used."

Miss Hunter said that her title, "Gad-

leans' most famous dishes. In this short period (made possible by the speed of modern gas ranges), she prepared such delicacies as oysters Rockefeller, gumbo, stuffed flounder, boiled shrimp, shrimp remoulade, creole doughnuts, and café brulot.

The afternoon program continued with demonstrations on new range features. Mrs. Elsie Alcorn, home service director, Milwaukee Gas Light Co., gave a progress report on the new rotisserie chart being set up by the Home Service Committee.

Four forms of gas rotisseries now on the market were presented by E. Ione

(Continued on page 30)

Facts and Figures

Prepared by A. G. A. Bureau of Statistics

Housing starts of 86,000 units during January equaled a 26.7 per cent gain over the comparable month in 1958. The January rate of private housing on a seasonally adjusted basis was 1,350,000 units, an increase of 32.4 per cent over January 1958.

Shipments of major gas appliances during January showed comfortable gains over the comparable period in 1958. Gas range shipments (148,600 units) were up 15.7 per cent; automatic gas water heater shipments (254,300 units) were up 8.0 per cent; and gas-fired central heating equipment shipments (75,800 units) were up 24.9 per cent. During this same period, oil-fired burner installations (44,017 units) were up 3.0 per cent.

Total sales of the gas utility and pipeline industry to ultimate consumers during December 1958 amounted to 8,709 million therms, a figure equal to an increase of 7.7 per cent over the sales of 8,083 million therms sold in December 1957. This increase in gas sales can be attributed to the greater number of new gas customers, the colder weather experienced throughout most of the country, and the greater use of gas by industrial customers.

Sales of gas for industrial use rose from 3,338 million therms to 3,484 million therms, a 4.4 per cent increase over last year. Industrial production, as measured by the Federal Reserve Board index, was up 5.2 per cent over December 1957. The index of industrial production (1947-1949 = 100) for December 1958 was 142, up seven points above December 1957. A. G. A.'s December index of gas utility and pipeline sales is 266.7 (1947-1949 = 100).

For the entire year of 1958, total utility and pipeline sales of gas aggregated 79,582 million therms, or an increase of 2.9 per cent over the 77,333 million therms consumed in 1957.

SALES OF GAS AND ELECTRIC RESIDENTIAL APPLIANCES DURING JANUARY 1959

(WITH PER CENT CHANGES FROM THE CORRESPONDING PERIOD OF THE PRIOR YEAR)

	January		December		1958-12 Months	
	Units	Per Cent Change	Units	Per Cent Change	Units	Per Cent Change
RANGES (including built-ins)						
Gas	148,600	+15.7	181,000	+33.3	1,896,700	- 3.7
Electric	n.a.	n.a.	143,900	+26.4	1,354,500	- 0.8
WATER HEATERS						
Gas	254,300	+ 8.0	207,700	+20.2	2,673,800	+ 5.6
Electric	n.a.	n.a.	65,600	+ 8.4	823,500	+ 2.9
GAS HEATING—Total	75,800	+24.9	79,700	+56.6	1,124,000	+15.6
Furnaces	63,300	+32.7	65,600	+69.5	833,700	+21.4
Boilers	5,700	+ 1.8	7,200	+35.8	122,100	+15.8
Conversion Burners	6,800	- 8.1	6,900	0	148,200	- 9.4
OIL-FIRED BURNER INSTALLATIONS	44,017	+ 3.0	41,083	+18.8	525,802	- 9.4
DRYERS (excludes combinations)						
Gas	n.a.	n.a.	47,950	+41.1	378,680	- 4.1
Electric	n.a.	n.a.	100,730	+18.1	823,530	- 6.5

Source: Gas Appliance Manufacturer's Association, National Electrical Manufacturer's Association, "Fuel Oil and Oil Heat," and American Home Laundry Manufacturer's Association.

GAS SALES TO ULTIMATE CONSUMERS BY UTILITIES AND PIPELINES DURING DECEMBER

(MILLIONS OF THERMS)

	1958		1957	Per Cent Change
	1958	1957		
Month of December				
All types of Gas	8,709.0	8,083.4		+7.7
Natural Gas	8,423.9	7,814.7		+7.8
Other Gases	285.1	268.7		+6.1
Twelve Months Ended Dec. 31				
All types of Gas	79,582.2	77,333.4		+2.9
Natural Gas	77,166.5	75,012.9		+2.9
Other Gases	2,415.7	2,320.5		+4.1
December Index of Monthly Utility Gas Sales (1947-49 = 100)	266.7	247.5		+7.7

PERTINENT BUSINESS INDICATORS, DECEMBER

(WITH PER CENT CHANGES FROM CORRESPONDING PERIOD OF THE PRIOR YEAR)

	December			November		
	1958	1957	Per Cent Change	1958	1957	Per Cent Change
Industrial activity (1947-49 = 100)	142	135	+ 5.2	141	139	+ 1.4
Consumer prices (1947-49 = 100)	123.7	121.6	+ 1.7	123.9	121.6	+ 1.9
Housing starts, Non-farm (thousands)	91.0	63.4	+43.5	102.0	78.2	+30.4
New private constr. expenditures (\$ million)	2,887	2,737	+ 5.5	3,119	3,005	+ 3.8
Construction costs (1947-49 = 100)	171.8	164.1	+ 4.7	170.8	162.9	+ 4.8

A continuing pressure of several forces will make it necessary to re-emphasize business fundamentals

How utilities can combat inflation

By HERMAN L. GRUEHN

Vice-President

Baltimore Gas and Electric Co.

During a recent rate case hearing, a newspaper reporter said, "I just don't understand what you all are talking about." It was explained to him that, if we could restrict our talk before a commission to the really essential facts of the company's problem, he would not only understand the discussion, but he would also be interested in it.

It is not surprising that a reporter, even though he is skilled in writing for the average intelligent citizen, does not feel at home with such topics as terminal versus average rate bases, imbedded costs of money, the distinction between reproduction costs and current costs, accrued depreciation, normalized income accounts, or any of the many technical matters which go into the record of a carefully conducted rate case. But, why is this so?

Perhaps we have not yet learned how to deliver to the public a successful presentation of the essence of a complex industrial story. Because of this inability, our customers are probably not aware of what a fine job the gas and electric industries have done in holding down the price of their products, particularly during the postwar inflationary period.

The performance of my company is probably not too different from those of

other companies in the gas and electric industries. We have been selling our products for a little less, in the aggregate, than if the price schedules at the bottom of the depression in 1932 were still in effect, and at only slightly above the levels in effect in 1945 before the present inflation began. Matched against all that has happened to our costs—wage



Mr. Gruehn says decreasing value of money has become world-wide problem

levels, tax levies, coal and oil prices, equipment prices—during the interim, that performance might be called somewhat spectacular. Is this fact not something which the public should know when our selling prices are up for judgment?

A continuing pressure of several

strong forces upon the gas and electric industries will probably make it necessary during the next decade to re-emphasize a few business fundamentals, perhaps to evolve new approaches to rate regulation, and certainly to find a way of getting the public to understand better our problems and proposed solutions. These forces are continuing inflation, the expected large growth in the volume of gas and electricity which will have to be supplied, and the leverage which inflation exerts upon big expansion.

What about inflation? The decreasing value of money has been a major fact in our economic affairs since World War II, and it has been not solely an American, but rather a world-wide, phenomenon, both political and economic in nature. Thus, the annual report of the Bank for International Settlements indicates that for the period 1946-56, the annual rate of depreciation in the dollar value has been 3.7 per cent, whereas the annual yield on government long-term bonds has been about 2.2 per cent: that is, the rate of decline in the value of the money has been about 1.7 times as much as the return on the money. The same relationships have occurred in Denmark, England, Sweden, The Netherlands, Norway and Italy. In Switzerland, the depreciation has been less, in France, it has been more. A 3.7 per cent compounded rate of depreciation in the value of the dollar is equivalent to a 50 per cent rise in prices every 11 years.

Whatever the causes, since we apparently can have periodic chills during our

(These remarks are from an address given by Mr. Gruehn at the Accounting Section meeting held during the 1958 A. G. A. Convention.)

fevers, a continuation of inflation seems to be likely for some years to come.

What about further growth? The public's need for energy in the form of electric power has, on the average, been more than doubling every 10 years for a half-century. Various skilled forecasters say that this need will continue to increase at the same rate for a number of years. The same facts apply to the public's use of energy in the form of gas. Last year, the demand was about two and one-half times what it was 10 years before, and five times what it was 20 years before. These increases for gas and electricity are, respectively, about 7 per cent and 8 per cent compounded annually, when measured over three or four decades, and are at a rate of about 10 per cent for the past decade.

Compound rates of this magnitude over so long a period represent both a tremendous economic force and a growth momentum not likely to terminate soon. Statistical tools which are available for the projection of growth curves produce answers which place the possible cessation of this expansion far beyond the period for which definitive business plans can be intelligently made. Indeed, there is little point in trying to forecast when this growth will stop.

Any series which proceeds at such compound rates as 7 per cent and 10 per cent will reach big numbers quickly. Therefore, it should surprise no one that our plants and facilities must again be greatly increased, and that our prospective needs for new capital to pay for these facilities are enormous.

The electric industry did not reach \$10 billion of utility plant until about the mid-1920's. About the end of 1949, the figure was \$20 billion; in mid-1954, it was \$30 billion; and at the end of 1957, it was \$40 billion.

It obviously takes much more money per year to maintain such high rates of growth, even without inflation. In this light, one can understand the reasonableness of the forecast made for the electric industry by Lloyd Brace, president, First National Bank of Boston. Mr. Brace said that a fair estimate of the total new construction needs of the investor-owned utilities for 1958-65, inclusive, would be \$40 billion. This would equal an average annual value for plant expansion which would be more than double the figure for 1948-57, he added. It would also be about \$5 billion more than the total estimated electric

utility plant account at the end of 1957, he concluded.

Mr. Brace's forecast and statement about doubled needs represent a compound annual increase of about 9 per cent and his figures are in line with the facts recorded during the past decade by the electric industry. Corresponding data for the gas industry would probably reveal a similar situation; that is, that, even if there is no further inflation, there will be a much larger need during the next decade for new capital funds than the gas and electric industries have ever had to obtain in a comparable period of time.

The leverage of inflation upon expansion is a separate problem in itself. A piece of equipment installed today costs more than the average cost of the equipment already installed, as well as a good deal more than the cost of the particular item being replaced.

Thus, even if the price level increases no further, these industries can expect a continuing rising trend in the average unit cost of the total utility plant in service. Moreover, further inflation can be expected to produce a still larger rise in that trend, with resulting repercussions on costs, selling prices, and finances.

Forces affect inflation

The effects of these three forces—large growth, inflation, and the leverage which inflation exerts on the financing of an expansion—are ultimately joined in two arenas: in the market place, where new capital funds must be obtained; and before the public regulatory authority, where the allowable selling prices for our products are determined.

The market place is understandably quite sensitive to what happens in the regulatory arena. Therefore, we are faced with the problem of remaining able to supply our products, in the volumes desired, at a price which is not in excess of the value of those products, which is as much under that value as we can manage, and which is nevertheless sufficiently substantial to allow the requisite new capital funds to flow freely into our industries. This point of balance is a pricing problem—essentially a long-range problem of financial management—and it requires both the consent and understanding of the public.

The two quantities in which an investor is primarily interested are the return *on*, and the return *of*, the capital invested in the utility's operations. The adequacy of these returns determines

whether or not enough new capital, particularly new risk capital, will subsequently flow into our industry. These returns are the principal items around which revolve most of the difficult discussion in rate-case proceedings. They are also the items most affected by continued inflation.

Under customary rate-case methods, the allowance for both the return *on* and the return *of* the capital are heavily influenced by the value placed on the capital investment by the regulatory body. Combined with the rate of return, the value determines the allowable operating income; combined with the annual rate of depreciation, it determines or measures the reasonableness of the depreciation expense allowance. The proper determination of this value, called the rate base, is becoming more difficult as inflation proceeds; at the same time, the need for the correct answer is becoming more important.

Present-day accounting systems, prescribed by public authority, are designed to furnish much of the factual material on which the regulatory process operates. A fundamental premise of these systems is that, over the years, the dollar has a reasonably stable purchasing power. This premise, however, is currently being violated in respect to the dollars recorded for both utility plant and for depreciation expense.

As inflation proceeds, this premise must be re-examined, because we can not have a sensible measurement when identical objects are stated at prices which vary as greatly as they do now on most utilities' books.

Moreover, the effect of violating this premise is much more severe in utility operations than in other industrial enterprises, because utility plants and facilities represent 85-90 per cent of all assets, and are comparatively long-lived industrial properties.

It is sometimes easier to understand a problem if the terms of that problem are extended. An illustration of this exists in France, where, after more than 40 years of both creeping and running inflation, there has developed a clear understanding of the fact that both the recorded book costs of plant and property and depreciation appropriations based on cost have little significance. Business enterprises are, therefore, permitted at any time to revalue fixed assets based on government price indices (using a multiplier which varies with the date of ac-

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Sees state of gas industry sound

By MARVIN CHANDLER

President

Northern Illinois Gas Co.

(In common with other gas company presidents, Mr. Chandler has been appearing this winter before a number of security analysts' societies. He has told them something of the territory served by Northern Illinois Gas Co. [now the eighth largest utility company in the country engaged solely or predominantly in the distribution of natural gas], the company's present and future prospects, and its financing plans. Each time, Mr. Chandler has turned from discussions of his own company to express his confidence in the gas industry as a whole. We are pleased to publish this excerpt from his talk as an excellent statement of the views of progressive management, and as a splendid affirmation of the gas industry's future.)

As far as Northern Illinois Gas Co. is concerned, we are convinced that our future will be only as good as the management makes it. Therefore, it is important for us to have capable, vigorous and aggressive people not only in command now, but also at lower age levels, ready to take over when the time comes. I am not concerned about entrusting the future of our company to the young men we already have in it, and to those whom we are attracting into it. In fact, we have already placed several of the younger men whom we hired since the war in positions of considerable responsibility.

Each year, we employ 15 to 20 new college graduates in engineering and

other areas. I am always impressed by the ability and enthusiasm of these young men. We do not entrust their development to chance alone, however; rather, we have a well planned management development program. We are also expanding our general supervisory training.

In addition, we supplement our own efforts by sending men in our middle and upper levels of management to advanced training courses and seminars.

We are also not concerned about the adequacy of natural gas reserves to meet our, and the gas industry's, requirements; this, however, does not mean that we are complacent.

As far as the country as a whole is concerned, proven reserves of natural gas totaled 247 trillion cubic feet at the start of 1958. This figure is equal to about 21 years' supply at the 1957 rate of production. Various experts who have studied this matter have concluded that the unproven reserves which will ultimately be discovered will total from two to five times the present proven figure.

In addition, Canada seems likely to be a substantial supplier of gas to this country in the future. The Royal Commission on Energy recently concluded that total ultimate reserves in Canada might be as high as 300 trillion cubic feet, a figure which is far in excess of the foreseeable Canadian requirements.

Finding these reserves here and in Canada will require much money and effort, and we are pleased that all three of our present and potential supplying pipeline systems are already engaged in vigorous exploration and development programs.

We believe that we cannot pass on entirely this obligation to explore and develop. As a result, for the last three

years, we have been engaged in a modest exploration program through our subsidiary, NI-Gas Supply, Inc. Thus far, we have spent about \$1 million of the \$1,600,000 which has been appropriated; and we have met with moderate success.

We have participated in 73 wells, of which about 60 per cent have been successful. On a net basis, our working interests amount to approximately 2.9 gas producers, 1.9 oil producers, and 3.6 dry holes. Current estimates of the recoverable reserves in the completed wells, discounting the present value of future production, prove these reserves sufficient. As a result, we can say that we are coming out a little better than even.

Since our present supply contracts are backed up by adequate reserves, we have not yet felt the need to engage in an expanded exploration program. We intend, however, to continue to gain experience in this field, and thereby to set the stage for greater efforts when we consider them necessary.

The gas industry is not content to rely entirely on the probable availability of natural gas in the future. Therefore, it is engaged in research on the production of gas which is equivalent to the natural product derived from coal and oil shale. The feasibility of making a high-heating-value gas direct from oil shale, as well as from coal, has already been proved in the laboratories of the Institute of Gas Technology. I am sure that, when the need for a substitute for natural gas arises, we will be prepared to meet it.

We in the gas industry are fortunate in having in the American Gas Association an energetic organization whose activities in fostering promotion, research,

and other services for our industry are of inestimable value. Through the joint subscription of most of the leading companies in the industry, about \$5 million annually is being raised for promotion and advertising. This money is spent on the industry's sponsorship of "Playhouse 90" over a national television network, on national magazine advertising, and on a wide variety of other advertising and promotion programs.

Through A. G. A., the industry spends about \$2 million annually for research. One field of study is gas production. In the area of residential air conditioning, several new units have recently been developed, and are now being studied by a number of manufacturers. Another result of A. G. A. research was the design, and placement on the market within the last year, of the new smokeless-odorless gas incinerator. I could cite many other similar achievements.

Besides supporting A. G. A.'s research program, we have our own research engineer who keeps track of research developments in other industries and institutions, and studies the applicability of these developments to the gas industry. This engineer has also developed several of his own ideas, which are of considerable promise. He is cur-

rently studying with interest the work being done on the fuel cell, since this system is the ideal ultimate means of converting the chemical energy of fuels directly into electrical energy.

Although the history of the fuel cell extends back for more than 100 years, the development of fuel cells which operate on hydrogen was only comparatively recent. Efficiencies of from 65-80 per cent have been achieved in the laboratory with this method. This result compares with about 35 per cent under the conventional methods of electricity generation. Gaseous fuels are an essential ingredient for the successful development of the fuel cell. It is now believed that natural gas can be utilized in this development. Thus, the fuel cell may play a major role in the future use of gas.

Thermoelectric devices which convert heat energy into electricity are also being developed rapidly, and they, too, are receiving our attention. We must not forget that the investment required to distribute a heat unit in the form of electricity is more than 10 times that necessary to transport the same heat unit in the form of natural gas.

We are also one of a small group of companies supporting a research project

at the Institute of Gas Technology. This project deals with developments in nuclear energy, and the applicability of these developments to the gas industry.

The initiative and solidarity of the gas industry were demonstrated recently, when Servel decided to abandon its air conditioning and refrigeration business. Arkansas-Louisiana Gas Co. immediately decided to manufacture air conditioners by purchasing that division of Servel. Shortly thereafter, Whirlpool Corp., demonstrating its confidence in gas-operated appliances, purchased the Servel gas refrigerator.

In both instances, gas utility companies all over the country lined up to support the new producers through sales commitments far exceeding previous levels. Arkansas-Louisiana Gas, in its first year, has done splendidly.

The substantial merchandising capabilities of Whirlpool will undoubtedly do much to secure for the gas refrigerator its rightful share of the market. In fact, we in the gas industry are all pleased by the vigorous promotion of a full range of gas appliances by both Whirlpool and Norge. Having these two large national merchandisers backing gas solidly is certain to be of great competitive help to us.

Inflation

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quisition), to credit revaluation reserves in that connection, and to base depreciation charges on the revalued property. In addition, the valuation reserves, or increases therein, are not taxable; appropriate treatment is given to inventories; and reserves are used annually to counteract inflation for these assets.

My point is simply this: when inflation continues to a substantial degree, the results of an accounting system are not properly usable for the determination of income, depreciation, property costs, or taxes, unless these results take into account the substantial changes in the currency in which the measurements are expressed.

There are, of course, psychological difficulties involved in such re-determinations. "Write-up," particularly in the utility industry, is a dirty word. So is "revaluation," at least when it means "upward revaluation." The term "reproduction cost" is often belabored by regulatory commissions; and the phrase

"present-day costs," or "present-day worth," when used as a tool of measurement, is suspect—even though it is regularly used in business operations. Moreover, when these measurements are rejected, there is usually no accompanying suggestion by regulatory authorities of which measurements can help to find rate bases which are realistically appropriate to a depreciated currency. Unfortunately, the problem of coping with changes in currency value, when determining rate bases, will not disappear simply because it is ignored.

Admittedly, the rate base standing alone is not the vital item used in calculating the fair and necessary earnings on capital investments. Rather, the vital item is the product determined by multiplying the rate base by the rate of return.

For a long time, it was thought that a rate base produced by the utility's accounting system could be used, regardless of price-level changes, with incidental administrative advantages and ease of regulation, and that only the rate of return had to be altered in order to

produce the earnings required by current facts. The trouble with that theory was that the rate of return first needed to be geared to some standard of reasonableness, which was generally based on the cost of money, with allowances made for the factors not covered by money costs.

Unfortunately, this theory of varying only the rate of return runs into serious administrative difficulties as the gap widens between today's dollar and yesterday's dollar. One can demonstrate this point facetiously by noting that it would make no difference in the end result if a utility's telephone number was used as its rate base, provided only that the rate of return was made large enough to produce the appropriate earnings. Seriously, though, such a facetious example could prove real if we were to go as far along the inflation road as France and other countries have already gone.

In these situations, the use of a rate base and such a rate of return would be useless as standards, since neither would measure within reasonable limits what it purported to represent. Moreover, if the

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*A. G. A. working on proposed coordinated plan
that would enlist both Section and Public Information Bureau*

May form area development program

A Task Force of A. G. A.'s Industrial and Commercial Gas Section met Jan. 22 to explore the need for gas industry sponsorship of an area development program. The meeting was led by G. R. Walton, chairman of the Task Force, and sales engineer, Houston Pipe Line Co.

As a result of this conference, A. G. A. is now working on a proposed coordinated program which will enlist the participation of both the Section and the Public Information Bureau. An Area Development Committee for the entire gas industry will probably be formed in the near future.

Statistics show that, when an industry locates in a new community and puts 100 employees on the payroll, that community gains an average of 296 more people, 112 more households, 51 more school children, 107 more registered passenger cars, 174 more employed workers, and four more retail establishments.

Thus, when a local gas utility secures new industries, it also promotes an increased demand for residential and industrial gas services.

The proposed objectives of the new committee include promotion of the area development idea to the gas industry; a program of workshops which can serve as forums for the sharing with gas companies of ideas on area development techniques; and coordination of area development activities with other A. G. A. activities.



The A. G. A. Industrial and Commercial Gas Section Task Force met in New York on Jan. 20 to explore the need for an industry-wide area development program. Seated (l. to r.): E. G. Silver, Providence Gas Co.; L. W. Crump, Oklahoma Natural Gas Co.; G. R. Walton, Houston Pipe Line Co., and chairman of the Task Force; Grove Thompson, Public Service Electric and Gas Co.; and R. J. George, Baltimore Gas and Electric Co. Standing (l. to r.): Bert H. Roberts, Minneapolis Gas Co.; C. L. Yost, The Peoples Natural Gas Co.; Charles Adler, Central Hudson Gas and Electric Corp.; R. T. Klemme, Northern Natural Gas Co.; Jack H. Mikula, Michigan-Wisconsin Pipe Line Co.; William Antonachio and Ralbern H. Murray, both A. G. A.

Some of the suggested ways in which the committee can put this program into effective operation are inclusion of area development as a discussion subject on A. G. A.'s convention program; publication of a booklet on the advantages to the gas industry of an area development program; distribution to various publications of articles which describe how area development can help both a community and its retailers; placement of

speakers on area development at intra-industry programs; and publication of a complete handbook for use by gas companies' planning area development programs.

The Task Force believes that an area development program to attract new industries and additional gas consumers is a necessity, since the financial well being of a utility depends upon the economic welfare of the area it serves.

*125 delegates attend
winter meeting in Chicago;
Van Hoef new chairman*



Elected 1959 officers of the Midwest Industrial Gas Council at a recent Chicago meeting are (l. to r.) Ira J. Roberts, Northern Indiana Public Service Co., secretary-treasurer; A. J. Van Hoef, Michigan Consolidated Gas Co., chairman; and Frank J. Dawson, The Peoples Gas Light and Coke Co., vice-chairman. Some 125 delegates attended the winter meeting

Midwest Council elects officers

The recent winter meeting in Chicago of the Midwest Industrial Gas Council attracted some 125 delegates.

Andrew J. Van Hoef of Michigan Consolidated Gas Co. was elected Council chairman, Frank J. Dawson of The Peoples Gas Light and Coke Co. was named vice-chairman, and Ira J. Roberts of Northern Indiana Public Service Co. was chosen secretary-treasurer.

"The Mackinac Bridge Diary," a motion picture which depicts the construction of the world's longest suspension bridge, was shown to the delegates. The film features pictures, taken at unusual photographic angles, of the construction workers at work hundreds of feet above the water.

A discussion of "Safety Controls for Gas-Fired Industrial Equipment" by G. M. Woods, special engineer, the Fac-

tory Insurance Association of Chicago, opened the meeting. Mr. Woods traced the history of controls from their original ancestors to their present-day descendants.

He emphasized that all modern industrial gas equipment and boilers must have adequate controls and safeguards. In addition, he warned the delegates that a control which is adequate for one installation may not be satisfactory for another. Gas engineers, he said, should study each installation and then recommend the appropriate controls.

Mr. Woods suggested that all industrial gas men should use the Factory Insurance Association's publications on "Recommended Good Practices for Class B and C Furnaces" and "Recommended Good Practices for Single Burner Boilers."

Delegates also viewed a presentation of "The New Bal-Tate Glass Bath Furnace Process" by Dr. Armand Di Giulio, president, and E. F. Elliott, vice-president in charge of sales, Bal-Tate Furnace Co., Royal Oak, Mich.

Mr. Elliott discussed the formation of the company, which sells equipment developed, and already used successfully, in Italy.

Dr. Di Giulio described the features and method of operation of this new type of rotary furnace. The furnace is essentially a sheet metal shell with a refractory lining which is equipped with a charging hole at one end and a discharging hole at the other.

The burner fires through the discharging hole, while common glass scrap is loaded into the slowly rotating furnace. The glass melts and then flows down to

cover the furnace bottom to about four inches in depth.

The principal use of this furnace is for heating steel billets for extrusion. The billets roll through the molten glass, which thoroughly descales the surfaces, and are heated in a comparatively short time, because of the efficiency of the heat transfer process. On discharge, the slight film of glass is wiped off mechanically, and the scale-free billets go directly into the extrusion press.

In another presentation, Ray West, manager, control device division, and Neil Lane, flame safeguard sales engi-

neer, Minneapolis-Honeywell Regulator Co., demonstrated the company's new Ultra-Violet Flame Safeguard System.

This flame-sensing device, which reacts only to the ultra-violet rays in a gas flame, is in no way affected by hot incandescent refractories or other radiating bodies. The device is expected to revolutionize the safety controls on industrial gas equipment of all types and on boilers.

The meeting was concluded with a sales talk by Milton W. Elert, superintendent, dealer coordination and training, Michigan Consolidated Gas Co., entitled

"The Human Element in Sales."

Mr. Elert cited numerous "do's" and "don'ts" in sales approach, and offered many practical suggestions for sales techniques. He told the delegates that, in order to sell, a salesman had to be enthusiastic about the product. Once the salesman is enthused, he said, the technique can develop naturally as a reflection of the salesman's personality.

Mr. Elert concluded with this motto: know your product, know your competition, and know your customer.

The spring meeting will be held from May 14-15 in Racine, Wis.

Record attendance expected at 1959 sales conference

A record number of industrial and commercial gas men, sales executives, and manufacturers are expected to attend A. G. A.'s 1959 Sales Conference on Industrial and Commercial Gas from April 7-9 at the Hotel Warwick in Philadelphia.

The meeting's theme, "Selling Gas Up," will be carried through in papers presented during the three days by experts in various fields. Commercial gas subjects are scheduled for April 7; a general session is planned for April 8; and an Industrial Gas Day is set for April 9.

Among the commercial gas topics scheduled are why and how to conduct a market study; pre-sales activities regarding contacts with health officials, school boards and consulting engineers; the value of a coordinated sales program for promotion and advertising; air conditioning promotion, sales, and service policies; market opportunities for commercial air conditioning, including details on the equipment available and the variety of possible commercial applications; and the value of exhibiting at

trade shows, with suggested methods of increasing booth attendance.

The need for both research and progressive thinking on the part of gas equipment manufacturers will be the subject of one of the general session talks.

Others will be how to work with food service equipment dealers to encourage sales; the value of a gas company's own speakers' bureau which can disseminate industry information to local groups; and continuing selling procedures, including an explanation of techniques and a description of group selling.

In addition, C. S. Stackpole, A. G. A. managing director, will deliver a talk on the significance of the industrial and commercial load in the operation of a gas utility.

Other April 8 activities will be the presentation of the Gas Appliance Manufacturer's PEP Prize Contest awards, the presentation of Life Membership certificates in the Hall of Flame, a luncheon at which the guest of honor will be from the Philadelphia Eagles Football Club, a GAMA reception, and the An-

nual Dinner at which entertainment will be provided.

On Industrial Gas Day, subjects will include the variety of applications possible with infra-red burners; the extra business which a gas sales engineer can find in the modern industrial plant; a new concept in flame-sensing equipment, including a demonstration; and a forecast of the role which gas will play in increasing the country's gross national product.

Other topics will be air pollution control by means of special gas equipment; year-round air conditioning; and GAMA's gas utility tour training program.

This is an educational program for gas industry personnel.

Commercial committees will meet separately on April 6, and industrial committees will meet on April 10.

The conference's advance program has already been mailed to all member companies and Section members. The program includes complete information on reservations and hotel accommodations.

Transcontinental Gas Pipe Line Corp. opens new 24-inch line

TRANSCONTINENTAL GAS PIPE LINE CORP. recently took the first natural gas into its new Southeast Louisiana lateral. The company has just completed this new 24-inch-diameter gathering line, which has been under construction since the fall of 1958.

The new line branches off the mainline system at the Louisiana-Mississippi state border and extends south for 65 miles to the Mississippi River. After a dual crossing laid

beneath the river near Convent, La., the line extends 22 miles farther into the heart of a new gas supply area. The line connects by means of smaller gathering laterals with nine gas fields in the vicinity of Thibodaux, La.

During 1959, the new gathering system will be extended to other natural gas fields along the Gulf Coast in the Mosquito Bay area, and out to offshore reserves under con-

tract to the company.

Transcontinental Gas Pipe Line's natural gas is purchased from more than 100 gas fields both onshore in Texas and Louisiana and in Mississippi.

The gathering line supplies more than one billion cubic feet of natural gas per day to the New York City-New Jersey-Philadelphia metropolitan area and to Southern states along the East Coast.

Inflation

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resulting rate of return were too far away from the current costs of money, the entire theory would be neither understood nor accepted by the public.

As a result, if inflation continues, this theory about putting all of the burden of adjusting for currency depreciation on the rate of return, instead of on the calculation of the utility's rate base in today's dollar, will be inadequate as a regulatory principle.

The current method for determining a sound and fair rate base is weak because we do not know how much weight to give to the measurement of a utility's property in current dollars, and how much weight to give to the measurement expressed in the dollars of various size in the account books. How much effect each of these measurements should have must now be developed by both the industry and the regulatory bodies.

First, we must realize that a supplier of risk capital considers himself an owner of property, not just of a dollar interest. Moreover, he wants to place his money in industries which offer the rights, as well as the risks, which go along with owning property, even though he may accept a limitation against the full operation of changes in price levels because of the public nature of the business.

Thus, the practical solution to this dilemma is giving to the worth of the property in present-day dollars the same weight as the utility's risk capital bears to its total capitalization. For example, if that ratio were 45 per cent, then 45 per cent weight would be given to current values of the utility's property, and 55 per cent to book costs.

Such a pragmatic weighting would lie between the extreme positions of giving complete recognition, and giving no recognition, to present-day dollars. By gearing the weighting to the risk capital, the method would go far in meeting the requirements of the risk capital supplier; and, at the same time, the method would be able to provide adequate coverage of the preferred stocks and bonds during depressed periods.

There may be better ways of solving this problem. My point is that, as inflation continues its distorting effects, the problem of how to compute a fair amount of earnings on invested capital must be solved quickly, and in a practical way which may be quite different

from today's methods.

The second problem to be solved involves the depreciation expense allowance, or the return of the capital investment as property is used up. An article by George Shea in the Aug. 4, 1958, issue of *The Wall Street Journal* dealt with the effect of inflation upon the depreciation expense problem in industry. Mr. Shea wrote:

Now, obviously it is sound business for growth to be financed out of new capital that comes from savings, whether those of the business itself or the savings of investors to whom it sells new securities. But equally obviously, it is unsound if mere maintenance and replacement have to be financed with new savings. Yet that is what happens under inflation. . . .

Essentially, that is the situation in the gas and electric industries today. There is a serious gap between the dollars recovered through depreciation expenses for a given article of plant or equipment and the cost of the equipment which replaces it, even when the new equipment is no more productive than the old. As a result, those additional dollars have to be taken entirely from new savings, even though it would only have been right for the individual for whom those facilities were originally supplied to have furnished at least some of those dollars.

Provisions work well

The recent accelerated depreciation provisions of the income tax law have worked fairly well as a practical device for coping with this phase of the inflation problem in most unregulated industries. Two circumstances, however, have made a similarly effective result less feasible for utilities.

One of these is that the useful life cycle for most industrial property is much shorter than that for utilities, and that an acceleration of the shorter period cuts the effective recovery period down to a relatively short time for the recovery of most of the dollars. The other circumstance is that industrial enterprises generally charge the full accelerated depreciation to current income, and then sell their products at prices which cover the high depreciation charges. The utilities cannot readily follow these procedures, which are currently avoided by the so-called "normalization accounting" and "flow through

accounting" methods employed in our industries.

So far, only the efforts of the industries' depreciation committees to clarify matters through their studies of economic depreciation seem to be close to the mark of what is reasonable and correct. In these studies, the annual depreciation rate, as applied to property investments, is stated in today's dollars, not in historical dollars. The same application, for business and tax policies, is in effect in France under the current inflation. In other words, though acceleration methods may be more feasible—from political, tax and regulatory viewpoints—than economic depreciation methods, which necessarily depart from historical costs, they are not adaptable to the needs of utilities.

These observations about the regulatory treatment of rate bases during the projected inflation, and about the resulting provisions for returns of, and returns on, investments are based on a single thought: that financial soundness is a must, particularly during inflation, if utilities are to be able to supply the public's ever-mounting requirements for mechanical energy. This financial soundness is what attracts new capital (particularly new risk capital) into industry in adequate amounts and at reasonable costs. In addition, the ability to attract capital serves as a positive proof of the usefulness of regulatory, management, and tax policies employed during a period of growth and inflation.

Fortunately, there is presently no barrier to financial soundness, as far as the industry's economics are concerned. Rather, we are in our strong years. The value of our products certainly is substantially above the current prices, and this fact can be proved by either a comparison of today's prices with the prices of the depression and pre-war years, in the light of what has happened to the prices of competing fuels, or by estimates of how much, or how little, business we would lose if it were to become necessary to raise our selling prices.

We are a business in which—when we have a stable level of wages, taxes and prices of materials—unit costs tend to decrease as volume increases. Fortunately, it takes only a moderate increase in selling prices to produce substantial increases in the earnings available for the support of our securities, if those earnings become necessary. Moreover, the demand for our products remains

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*Transmission men meet May 18-19 in Dallas;
Production group goes to Rochester, N. Y., from May 25-27*

2 annual conferences set for May

Dallas, Texas, and Rochester, N. Y., will become the temporary operating headquarters for the gas industry this spring when the Operating Section conducts two separate technical conferences at these two cities. Each city will, for a few days, play host to operating men from opposite ends of the industry.

Transmission conference

On May 18 and 19, the annual Transmission Conference will open at the Statler Hilton Hotel in Dallas. Some 500 men concerned with pipeline construction and maintenance, compressor stations, communications, gas dispatching and measurement, and underground storage will attend. Two general sessions are scheduled for the mornings, and nine sessions are scheduled for the afternoons.

At the first general session, R. V. Campbell, American Louisiana Pipe Line Co., will preside. He is chairman of the Transmission Committee. Mr. Campbell will introduce L. T. Potter, president, Lone Star Gas Co., who, as second vice-president of A. G. A., will welcome the delegates.

Microwave, one of the most important tools of the industry, will be explained by D. E. York, United Fuel Gas Co. He is a past chairman of the Section's Communications Committee. Douglas Ball, of Ball Associates, will discuss the storage of gas in water sands.

Computer applications will be the subject of H. M. Joiner, The Peoples Natural Gas Co. This session will close with a panel on the proven applications of compressor station automation. W. C.



L. T. Potter, president, Lone Star Gas, will welcome the Transmission delegates



R. E. Ginna, chairman, Rochester Gas, will keynote the Production conference

Day, Columbia Gas System Service Corp., will serve as panel moderator. Panelists will be D. L. Corkill, Northern Natural Gas Co., George Fields, Southern Natural Gas Co., R. D. Milam, American Louisiana Pipe Line Co., and J. E. Wallace, Hope Natural Gas Co.

Also to be presented at the opening session will be a summary of the Section's *Eighth Annual Report on Underground Storage Statistics* by L. R. Kirk, The Ohio Fuel Gas Co., and chairman of the subcommittee which compiled the report.

The second general session will have an international flavor. Speakers will represent the United States, Canada and France. J. Le Guellec, chairman of the board, Gaz de France, Paris, will discuss the gas industry in his country, while

E. V. Hunt, The Alberta Gas Trunk Line Co., Ltd., will describe the construction, testing, and operating of a Canadian natural gas pipeline system. G. G. Wilson, Institute of Gas Technology, will report on the interior coating of pipe, and C. E. Terrell, Southern Natural Gas Co., will discuss the whys and wherefores of offshore gas measurement.

Dr. Walter Orr Roberts, of the High Altitude Observatory of the University of Colorado and one of America's foremost meteorologists, will tell of the progress being made in solar weather research. The final paper will be on pipeline research, as carried out under the A. G. A. PAR Plan, by D. C. Benson, Texas Gas Transmission Corp.

N. P. Chesnutt, Southern Union Gas

Co., and chairman of the Committee on Underground Storage, will preside at this session.

On Monday afternoon, sessions have been scheduled on communications and tele-control, compressor stations, gas measurement, and pipelines. Tuesday afternoon sessions will be on gas dispatching, underground storage, compressors, pipelines, and communications.

Production conference

The Sheraton Hotel in Rochester will be the scene of the Production Conference from May 25-27. Nine sessions, as well as inspection trips to the facilities of the Rochester Gas and Electric Corp., are scheduled.

The first general session will be under the chairmanship of Hugh T. Maloney, Philadelphia Gas Works, division of The United Gas Improvement Co. He will introduce S. W. Horsfield, Long Island Lighting Co., Section vice-chairman, who will report on the Section's activities. A welcome to Rochester will

be extended by the Hon. Peter Barry, Mayor of the city. The keynote address will be given by R. E. Ginna, chairman of the board, Rochester Gas.

Safe practices for stand-by plant operations will be discussed by C. L. Pendleton, New England Electric System. A. H. Wicht and Irving Deutsch, Long Island Lighting, will explain the factors affecting stability of odorants in gas mains; and Dr. Minor C. K. Jones, Esso Research and Development Co., will consider areas of mutual interest in the oil and gas industries. Rounding out the session will be the presentation of the annual report of the Builders' Subcommittee by its chairman, D. K. Taylor, Connelly, Inc.

Presiding at the second general session on May 27 will be R. L. Coryell, Consolidated Edison Co. of New York, Inc. He is chairman of the Chemical and Engineering Committee.

F. J. Pfluke, past chairman of the Section, will tell of the gas and electric facilities at Rochester Gas.

Planning for the future in an atmosphere of change will be the subject of an address by H. R. Huntley, American Telephone and Telegraph Co. The two final papers will be on industrial practice in the care of stand-by production equipment, by D. A. Dundore, Philadelphia Gas Works, division of The United Gas Improvement Co., and gas dispatching, by C. M. Springer, Transcontinental Gas Pipe Line Corp.

On the first afternoon, there will be two sessions on fluid fuels and odorization. The second morning will have two parallel sessions on manufactured gas production and chemicals and engineering. That afternoon, sessions will consider gas conditioning, solid fuels, and manufactured gas production planning.

On the final afternoon, field trips are being arranged by Rochester Gas.

The registration fee for each conference will be \$20. This includes one copy of the Operating Section's Proceedings for 1959. There will be no advance registration.

Operating Section conducts question and answer session

The Operating Section's Chemical and Engineering Committee, at its last meeting, held a round-table discussion to answer questions members considered pertinent.

Committee members participating included R. L. Coryell, committee chairman, Consolidated Edison Co. of New York, Inc.; W. E. Churchill, Boston Gas Co.; M. D. Crane, The Peoples Natural Gas Co.; D. F. Cundari, Public Service Electric and Gas Co.; Dr. M. A. Elliott, Institute of Gas Technology; E. W. Evans, Phillips Petroleum Co.; R. W. Gilkinson, Rochester Gas and Electric Corp.; N. A. Manfred, Chicago District Pipeline Co.; P. H. Miller, Texas Eastern Transmission Corp.; A. W. Olsen, Providence Gas Co.; R. M. Pearson, Michigan Consolidated Gas Co.; W. G. Renz, Long Island Lighting Co.; R. L. Rissler, Rochester Gas and Electric Corp.; E. O. Rossbach, The Brooklyn Union Gas Co.; C. E. Utermohle, Jr., Baltimore Gas and Electric Co.; and J. W. Webb, Consolidated Edison Co. of New York, Inc.

Following is a summary of the important questions and answers.

Q. What sealants, other than tar or tar products, are available for waterless holders?

A. Mr. Corywell: Our company uses a 0.90 gravity oil in place of tar or tar products for sealing two waterless holders. This oil has been very effective with natural gas.

A. Mr. Renz: We are using a similar oil sealant.

Q. Are the present sealants, used for gas storage and distribution, satisfactory, or should research be directed toward development of better sealants?

A. Mr. Cundari: Gas companies are being asked through a survey what they would prefer in a line of better sealants. One company has found humidification will help reduce leaks in the distribution system. Another indicated that a good all-around internal sealant is still necessary. One sealant, which could be applied while the gas main is in service, would be desirable. Nearly all sealants on the market today require that the section of main to be treated be taken out of service. And one company has indicated that a spray application of Seal-All definitely cuts down on leaks which were detected previously in one section

of the main.

Q. Has anyone used cetyl alcohol to reduce evaporation of water inside a water-sealed gas holder in order to permit control of send-out gas humidity?

A. Mr. Churchill: Cetyl alcohol has been used in city water systems to reduce the rate of evaporation. Our company has experienced unnecessary drip pumping due to moisture loss from plant holders.

Q. What safety factors can you suggest regarding the danger of explosions?

A. Mr. Miller: Due to the danger of explosion, which possibly could occur from leakage of propane being transported by cylinders in measurement engineers' cars (for refrigerating water vapor dew point testers), we have discontinued the use of propane for this purpose. We have adopted the use of CO₂ purchased in high pressure cylinders. CO₂ is a satisfactory refrigerant which eliminates the danger.

A. Mr. Corywell: Our company has been concerned with lightning striking close to the vent of an odorizer tank, thereby igniting the odorant vapors. We find that the flame arrester and activated charcoal in the deodorizer unit will pre-

vent a fire.

A. Messrs. Renz, Churchill, and Olsen: In order to increase the accuracy in the use of combustible gas indicators, our companies used methane-air ampoules for checking instruments.

Q. What sections of the modern gas production plant are most subject to corrosion? Is this corrosion largely atmospheric, or is it caused by substances used at the plant or in the pipelines?

A. Mr. Rossbach: Our company adds ammonia to the gas at the outlet of the peak shaving manufacturing sets. This raises the pH from two to about seven or eight in the wash boxes.

A. Mr. Utermohle: We add soda ash to the wash box water at all times in order to maintain the pH from seven to eight.

A. Mr. Cundari: When our company backfills with soil, the pH is regulated to seven plus. This is done with the addition of limestone.

A. Mr. Renz: Our company has specifications for backfill pH.

Q. What about an instrument for continuously determining and recording the mercaptan content of gas?

A. Mr. Miller: Some of our customers use the Titri-log with excellent results. Although I am not positive, I believe the Titri-log can be used for selectively recording the mercaptan content.

A. Mr. Gilkinson: The Austin IBR 313 Titrator might be the answer for such an instrument.

A. Dr. Elliott: The use of the gas chromatographic apparatus is quite feasible.

Q. Since natural gas has so largely displaced manufactured gas, are there any more waste disposal problems?

A. Mr. Miller: Natural gas in most high pressure transmissions has been processed for removal of heavier hydrocarbons. There are exceptions, however, where liquid hydrocarbons have condensed in gas transmission lines, making it desirable to have some method for removing and disposing of the condensates. The "drip collar," a patented device, appears to be an economical and effective gas pipeline liquid content monitor for continuous trapping of pipeline condensates. Whether condensate is burned as a waste product or tanked for sale or reprocessing depends upon the quality and removal location.

A. Several members indicated that waste disposal problems still are paramount, even though natural gas has

largely displaced manufactured gas. The reason given is that much stand-by equipment, which is frequently used, poses these problems, and they become important, mostly because this equipment is not used regularly.

Q. Are there any air pollution problems associated with the gas industry?

A. Mr. Miller: We use the Shell Development Co.'s burn method.

A. Mr. Rissler: An adaption of the IGT method which involves burning the sample gas with pure oxygen in a Vicor glass chimney. (Note: See ASTM Method 1072-54T.) The resultant sulfur is oxidized to sulfate and determine turbidimetrically by use of the Klett-Summerson Colorimeter.

A. Mr. Pearson: We use the Shaw method.

Q. How many companies are utilizing gas chromatographic apparatus and equipment for analyzing known and unknown gases, and what has been the experience with regard to suitability, accuracy and over-all ease of operation?

A. Mr. Miller: We send all of our natural gas samples to Centenary Testing Laboratories in Shreveport, La. We employ both the low temperature distillation method and chromatography, both equally reliable. Of course, chromatography is much faster. Robert L. Hood, the laboratory director, is an expert on both methods and would be happy to answer questions concerning same.

A. The following committee members indicated that their companies were using gas chromatographic equipment: Mr. Crane, Burrell 2 column; Mr. Renz, Perkin-Elmer 1 column; Mr. Corywell, Perkin-Elmer; Mr. Pearson, Beckman GC-1; Mr. Cundari, Beckman GC-2; Mr. Utermohle, Beckman; Mr. Evans, home-made unit; Dr. Elliott, Gulf Partitioner; and Philadelphia Electric Co., Perkin-Elmer.

Q. Are all chemical analyses and test methods now used in the gas industry satisfactory, or should research be conducted to develop better methods?

A. Mr. Miller: The industry is making good progress, and I do not believe that a special research project is necessary at this time.

Q. What are the latest developments in methods for determining the quality and size of solid particles in gas streams?

A. Mr. Cundari: The work accomplished under the A. G. A. PAR research program, Project PF-15 (which

was done at the Arthur D. Little Laboratories), covers the answer to this question very thoroughly, and can be obtained from American Gas Association Headquarters.

Q. Has anyone experienced odor levels of mixed gas and/or natural gas in the spring, that is, with increasing air temperature?

A. Mr. Miller: Gas odorants vaporize faster in warmer weather, giving more efficiency during the winter.

A. Mr. Churchill: We use kerosene for fogging. This supplements our odor rate to the extent of about .2 lb. 1 Mmcf. However, during the spring, we have to shut off the odorizer because the level increases too much. This may be due to increased air temperature in the spring.

Q. Can we definitely establish the point of test for odor level near the outlet of the gas supplier's odorizer on distribution customer complaints?

A. Mr. Manfred: It has been our practice to have each utility company establish what odorant concentration will produce the required odor level for proper identification of gas in air. Once this has been established, the level is maintained at the odorizer. It is impossible to cover the entire distribution system of utility companies with precisely the same odor level. We have encountered some areas where the level is considered too high, and others, where it is too low. The low areas are provided with supplemental odorization, and, in the high areas, increased service activities soon bring the leak complaints in line. There can be no uniform odorizer operation, if adjustments must continually be made on the basis of leak complaints. On this basis, the odor level curve will follow a sine wave curve, and could introduce a dangerous situation during periods of cutbacks of odorant injection.

Q. Have you noticed any adverse effects on odor level of gas when wide variations in differential pressure (that is, 2 in. to 70 in. W.C.) occur at the Peerless Odorizer?

A. Mr. Manfred: We have found our Peerless to be off as much as 20 per cent at the lower differential range, and, in all instances, low. The Titri-log monitoring by utility customers has brought to our attention the lower odorant level at the low flow rates. Due to the low load factor on this system, it is almost impossible to make reasonable adjustments on the odorizer to meet all conditions of gas flow.

Inflation

(Continued from page 26)

tremendous. In short, to the extent that the problem of selling prices is the deciding factor, there is no reason why financial soundness cannot be maintained.

Financial soundness, however, involves more than just the proper determination of selling prices. Workable tax policies, on the part of both the community and the federal government, are also necessary. Accounting policies, too, are important, because the proper determination of what costs should be met today and what costs should be met in the future has become both more difficult and more significant as a result of the changing value of the dollar. Finally, financing methods and capitalization structures are also necessary factors.

The experiences of the railroad industry give us much material for the study of financial soundness, because that industry, too, has a long-term life and a need for large investments in relation to annual revenues, and is affected by public control over selling prices. Moreover, these experiences are older than ours. When one hears discussions about the merits of higher debt ratios for our industries, or about leverage in capitalization structures, or about the cases for either more or less depreciation provisions, or about the merits of various accounting theories dealing with the capitalization of construction overheads, one should pause to consider some of the experiences which the railroad industry has had with these matters.

For example, one could compare three major Eastern roads which, in the late 1920's and early 1930's, differed only slightly in their operating characteristics, but of which just one avoided serious financial difficulties. In regard to their operations, it would be quite difficult to tell them apart: that is, in their production of revenue per train mile, in their operating ratios, in the degree of shrinkage in their operating revenues during the depression years, in the degree of their subsequent recovery therefrom, and in their control of expenses during depression and recovery. The notable difference among them stemmed from the fact that the one which did not get into difficulties had to support a capitalization only about half as great (per dollar of revenue) as those of the other two; and, even so, its common equity ratio was about twice as great.

One could also compare a major Eastern road and a major Western road which, in the same period of years, also differed only slightly in revenue production and operating characteristics. One of these two got into serious difficulties; the other did not, even though its revenues shrank in the same amount. Actually, the successful road had a little more capitalization to support (per dollar of revenue) than did the troubled road. Where the difference lay was in the balance between common equity and senior securities: the successful road had a 60 per cent equity, while the other had only about 35 per cent. Therein lay the greater financial soundness, in terms of ability to ride through a period of shock, which spelled the difference.

There is also the lesson that a free flow of capital (particularly risk capital) into industry can end rather suddenly. In the years from 1922-30, the railroads sold large amounts of capital stock to the investment markets. Even in 1930, the first depression year, they sold \$66 million. In all the years since 1930, however, the railroads' total sales of stock have aggregated only \$21 million: that is, in more than a quarter of a century, the total sales have been less than one-third of the sales in 1930 alone. Those total sales, by the way, are not much different from one fair-sized issue today by one gas and electric utility company in one year.

There is still another lesson: that, despite the shocks generally experienced in the industry, there are some major railroads whose financial structures were strong enough to enable them today to earn (per share) substantially more than they earned in 1929. Indeed, the growth in these per-share earnings, during the decade after World War II, was at compound rates of increase which were higher than the average performance of gas and electric companies.

The time to make certain that financial soundness is a reality is during an industry's strong economic years. We are now in such a period. But, will we remain there? To do so, we must handle with great care the large expansion ahead of us. To do so, we must determine correctly today's full costs of operation, the selling prices which will cover these costs in full, and ways to maintain investment attractiveness. We must not defer our problems.

Home Service

(Continued from page 17)

Lankelma, home service director, The Peoples Gas Light and Coke Co., Chicago, who, with carefully advanced timing, displayed finished food products which illustrated quality in browning, appearance and flavor. Two new broilers on gas ranges were demonstrated by Mrs. Glenna Pierce, Norge Sales Corp., and W. F. Johnson, Hardwick Stove Co.

Miss Slagle presided at the Saturday morning session. Speakers were Emogene Burge, United Gas Corp., "Home Service Platform Kitchens Spell Modernity"; Jean Cox, Southern Union Gas

Co., "Do-It-Yourself Teacher Workshops"; Mary Lou Sills, Union Gas Co. of Canada, Ltd., "Space Age Terminology in Youth Programs"; Sarah Sicker, South Jersey Gas Co., "Holiday for Housewives"; Laura M. Piepgras, Central Electric and Gas Co., "Promotion of the Other Five"; Frances Welch, director of lunch rooms, Dallas, Texas, Independent School District, and president of the Texas Home Economics Association, "Our Challenge—Your Challenge"; Laverna Best and Martha McAllister, Houston Natural Gas Corp., "Seeing Is Believing"; and C. S. Stackpole, A. G. A. managing director, "What Are You Gals Totin' Home—Revised Edition."

The final day accented home service in action. Miss Burge pictured, with colored slides, the new kitchens displayed in the Natural Gas Building at the Louisiana State Fair in Shreveport.

During her speech, Miss Cox, of El Paso, Texas, described occasions where teachers of home economics are brought together in small groups to learn about new features of gas equipment similar to that installed in high schools by Southern Union Gas Co.

Miss Sicker described a theatrical cooking school popular in the smaller towns served by South Jersey Gas Co.

Thumbnail accounts of company promotions on incinerators, water heaters,

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Sales conferences set for May

Final details are now being completed for the Residential Gas Section's Eastern Gas Sales Conference, set for May 11-12 at the Netherland-Hilton Hotel in Cincinnati.

The area served by the conference includes Delaware, Kentucky, Maryland, New Jersey, New York, Ohio, Pennsylvania, Virginia, West Virginia and Washington, D. C.

The meeting will be directed by Charles E. Gordon, business promotion manager, United Fuel Gas Co., and chairman of the Eastern Gas Sales Council. Walter C. Beckjord, chairman of the board, Cincinnati Gas and Electric Co., will deliver the keynote address.

Some of the subjects which will be considered at the conference are the importance of the gas refrigeration load to the industry, the value of sharp salesmanship as a key to sales, sales training, how to sell the all-gas laundry, selling gas through kitchen modernization, and the Gold Star range program.

The Residential Gas Section's annual Midwest Regional Gas Sales Conference will be held from May 18-20 at the



Frank Soldan, Kansas-Nebraska Natural Gas Co., will direct Midwest meeting



Charles E. Gordon, United Fuel Gas, will give Eastern keynote address

Edgewater Beach Hotel in Chicago.

The conference serves Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri, Nebraska, North Dakota, South Dakota and Wyoming.

Frank Soldan, sales manager, Kansas-Nebraska Natural Gas Co., Inc., will direct the conference. J. Theodore Wolfe, A. G. A. president, will deliver the keynote address.

Some of the topics planned for discussion during the conference are gas year-round air conditioning, incineration, the importance of the gas appliance manufacturer in the progress of the industry, the significance of the new home market, the problems created by the increased installation of electric heat pumps and electric resistance heating, dealer relations, and the LP-gas industry.

Home Service

(Continued from page 30)

air conditioning, heating and gas lighting were presented by Mrs. Piegras of Lincoln, Neb. She indicated that the "other five" are being given as much promotion as the usual three appliances promoted by home service and sales.

School demonstrations are being given the "modern pitch" today, according to Miss Sills. She pointed out that "planets, jets, rockets and sputniks provide a modern way to describe modern gas appliances to our future homemakers."

Miss Best stressed the unusual feature of a gas range demonstration presented without the use of food. Saving time in covering the Gulf State area served by her company was a major consideration, she said, adding, "to attract student interest in a detailed range demonstration,

a game was the finale in which each class member played an adapted bingo game with the questions based on range points that had been made in home service demonstrations."

Mrs. Welch accented the challenge of change as the spark of living today, and defined the word, imagination, as the "ability to see beyond the facts or the obvious, and become the hard core of human progress." With enumerated examples where imagination has served to meet the challenge of change, Miss Welch challenged home service to read, think, plan, and do, in order to meet the challenges ahead. She closed with the phrase, "home economics is not for the tired or timid."

Mr. Stackpole praised the work done by the industry's home service departments, and reviewed the industry's growth. He listed 25 suggestions which

will enable the home service representative to perform a better service for both her company and the gas industry.

In his closing remarks, Mr. Stackpole asked delegates this question: "How's your enthusiasm quotient?" He quoted an internationally known industrialist, who said: "Enthusiasm is a wonderful work. But more, it is a wonderful feeling. It is a way of life. It is a magic spark that transforms 'being' into 'living.' It makes hard work easy and enjoyable. There is no better tonic for depressions, no greater elixir for whatever happens to be wrong at the moment, than enthusiasm.

"I have found enthusiasm for work and life to be the most precious ingredient in any recipe for successful living. And the greatest feature of this ingredient is that it is available to everyone—within himself."

Industry news

Gas discovered one mile underground

THE DISCOVERY OF NATURAL GAS in a previously unexplored strata of rock more than a mile underground, in Medina

County, Ohio, has been announced by Herbert Titsch, manager of production for The Ohio Fuel Gas Co.

The discovery is the result of a recently completed deep test well, which was drilled jointly by Ohio Fuel, The East Ohio Gas Co., and Wiser Oil Co., Sistersville, W. Va.

Mr. Titsch explained that drilling for natural gas in Ohio had previously been confined to the Medina horizon or other gas producing sands above it. This discovery, he said, adds a potential producing horizon at a lower level which may be of vital importance throughout the entire Appalachian area. However, he added, the new well must be carefully studied in order for the company to determine whether production will prove to be of commercial value.

Production of the new well was gauged at 1,210,000 cubic feet open flow, with rock pressure of 2,100 pounds. "The open flow is

no greater than the average gas well in the Clinton sands in Ohio," Mr. Titsch explained. "However," he said, "the rock pressure is almost twice as great."

The test well, called F. Smith 1A, is located in Hinckley Township of Medina County, 10 miles northeast of Medina. It was drilled to a depth of 7,040 feet. The gas was discovered in a type of limestone called Dolomite, near what geologists call the Cambro-Ordovician contact, at a depth of from 5,775 to 5,790 feet.

The total cost of drilling, coring and testing the deep well will be about \$250,000. The well was drilled by Delta Drilling Co. of Tyler, Texas. It required 102 days to complete.

The temperature of the rock at the bottom of the test well was recorded at 123° F. At the Clinton sands (3,500 feet) the temperature was recorded at 93° F.

Connecticut Light and Power to install IBM electronic brain

THE CONNECTICUT LIGHT and Power Co. will install an International Business Machines 7070 system, commonly known as an electronic brain, at its Berlin headquarters early in 1960. The company is said to be the first gas utility in the country to order the large-scale data processing system.

L. E. Reynolds, vice-president and treasurer, Connecticut Light and Power, described the 7070 as a fully transistorized machine which is able to store and memorize vast quantities of information, and to process

that data at high speed. The 7070, which will be the "heart" of a newly created data processing department for all sections of the company, will eventually handle all repetitive accounting, engineering, and sales clerical operations.

Sherman R. Knapp, president, said that the company had decided to install the 7070 because we "have been adding about 10,000 customers annually since the end of the war and expect the same rate of growth to continue indefinitely," and because of "the in-

creasing demand on the part of government and other agencies for a myriad of reports and paper work."

George A. Ford, director of data processing, said that, although the 7070 will mechanize much of the present clerical work, it will not replace any personnel. Rather, he explained, there will be new and different job opportunities, because the processing system will be operated by present company employees who will be trained by IBM and then assigned new duties.

PEP commercial gas campaign launched in eastern Massachusetts



Participants in the Boston meeting which launched the third annual PEP commercial gas campaign included (l. to r., rear) Richard T. Keating, Edgar A. Jahn and Roland W. Johnson, and (front) Fred A. Kaiser, John J. Quinn, Roy E. Wright and Samuel E. Tappan, utility men and manufacturers

COMMERCIAL SALESMEN from 21 utilities and 30 restaurant equipment manufacturing companies in eastern Massachusetts launched the area's third annual PEP campaign on Jan. 17.

Samuel E. Tappan, manager, industrial-commercial division, Boston Gas Co., outlined the mechanics and purposes of the campaign. Roy E. Wright, director of gas sales, New England Gas and Electric Association Service Corp., moderated the program.

Speakers and their topics included Fred A. Kaiser, vice-president and general sales manager, Michigan Consolidated Gas Co., "People Buy and People Sell"; Richard T. Keating, "Fryers and Frying"; Edgar A. Jahn, assistant gas utilization engineer, A. G. A., "Kitchen Ventilation and Comparative Operating Costs in the New England Area"; and Herman N. Johnson, A. O. Smith Corp., the use of hot water for dishwashers.

Utility representatives included John J. Quinn, vice-president, Boston Gas; Roland W. Johnson, assistant vice-president, Brockton-Taunton Gas Co.; and Robert C. Smith, Jr., commercial-industrial supervisor, Mystic Valley Gas Co.

Food service equipment representatives included J. S. Shulman, Boston China and Equipment Co.; Morris Gordon II, Morris Gordon and Son; John S. Crowley and Herbert Sears, H. M. Faust Co.; and William Sullivan and Joseph Ivens, O'Toole Co.

Corrosion papers issued

A COPY OF THE PROCEEDINGS of the 1958 Appalachian Underground Corrosion Short Course will be sent shortly to each of the 500 people who attended that session. The Proceedings include 38 papers and a number of illustrations on underground corrosion. The 1959 session of the course, which is sponsored by the University of West Virginia, will be held from June 2-4 in Morgantown, W. Va. Further information is available from J. H. Alm, Room 605, Two Gateway Center, Pittsburgh 22, Pa.

Russia to view gas dryer

A MAYTAG GAS CLOTHES DRYER will be part of the appliance display at the American National Exhibition in Moscow this summer. The Maytag Co. has agreed to supply the appliance, which was requested by the United States Office of International Trade Fairs. The American exhibit will show U.S. progress in science, technology and culture, and will emphasize America's desire for peace. Some 3.5 million Russians are expected to visit the two-city-block exhibit, which will open about July 4 and last until Sept. 2.

Conference sets new dates

NEW DATES FOR THE Florida-Georgia Gas Association's annual (1959) spring management conference are May 20-23. The meeting will be held at the Fort Harrison Hotel in Clearwater, Fla.

Gas marks 100 years of service in Joliet, Ill.

A CENTURY OF GAS SERVICE in Joliet was celebrated in January by Northern Illinois Gas Co. The event was marked by both the presentation of an operating gas lamp to Will County and a commemorative dinner for officials and civic leaders of Joliet and Will County.

Marvin Chandler, president, Northern Illinois Gas, spoke at the dinner about gas service in the future. He said, "We have planned an extensive construction program to accommodate the many new customers to be added each year, as well as to continue maintenance and improvement of our present system. This program calls for the expenditure of \$158 million over the next five years."

Mr. Chandler said that proven reserves of natural gas in the United States amount to about 21 years' supply at the present rates of consumption. Unproven reserves, he added, will probably total between two and five times the present proven amounts, according to expert estimates.

Before the dinner, Mr. Chandler dedicated a gas lamp on the east side of the Will County Court House yard, which was the site of the first use of gas in Joliet. Meade Baltz, chairman of the county's board of supervisors, accepted the lamp on behalf of the county, and aided Mr. Chandler in lighting it.

James P. Hennessy, mayor of Joliet, took part in both the presentation ceremony and the dinner. He congratulated the gas company on its progress in gas service over the years.



A gas street lamp is lit in honor of 100 years of gas service in Joliet, Ill., by (l. to r.) Meade Baltz, chairman, Will County board of supervisors; James P. Hennessy, mayor of Joliet; Barton Juell, Joliet district manager for Northern Illinois Gas; Marvin Chandler, president of the gas company

A. G. A. announces new publications issued during February

INDUSTRIAL AND COMMERCIAL

- Gas Powered Air Conditioning. Reprint from *Air Conditioning, Heating and Ventilating's* reference section. 15 cents.

NEW FREEDOM

- 40-Year-Old Kitchen Young Again. Reprint from *Living for Young Homemakers*. 10 cents.
- Our Jewel Kitchen. Reprint from *Everywoman's Family Circle*. Free.
- Once-in-a-Lifetime Kitchen. Reprint from *Woman's Day*. Free.
- Save Without Scrimping. Reprint from *House Beautiful Building Manual*. 2½ cents.

COMMERCIAL PROMOTION

- "Hi-Load" Water Heating Campaign Portfolio. Free.

CONVENTION

- A. G. A. Awards. Free.

UTILIZATION

- Gas and Electric Service in Multiple Dwellings, by H. Zinder and Associates. \$1 to members; \$2 to non-members.

PROMOTION

- Gold Star Emblem. Made of vacuum-formed plastic. \$2.30.
- Gold Star Sticker. One inch in diameter. \$10 per million.

LABORATORIES

- American Standard Listing Requirements for Relief Valves and Automatic Gas Shut-

Off Devices for Hot Water Supply Systems, effective Jan. 1, 1959, Z21.22-1958. \$1.50.

OPERATING

- The National Appliance Field Observation Program, by the Customer Service Committee. Free.

ACCOUNTING

- Financial Reporting Practices and Trends as Disclosed by an Analysis of the Annual Reports to Stockholders of 56 Gas and Electric Companies for the Years 1955 Through 1957, by the Committee on Financial Reporting. Free.
- 1958 Compendium Committee Report. (First supplement to 1957 report.) By the Compendium Committee. \$2.

Public utility financings reach new high of \$5 billion in 1958

FINANCINGS BY THE NATION'S privately owned public utility industry during 1958 set a new record of about \$5 billion, a figure up slightly from the previous peak of \$4.9 billion established in 1957. These statistics were issued by Ebasco Services, Inc., management consulting, engineering and construction firm. Competitive bidding accounted for 47.5 per cent of the

total 1958 public utility financing.

Figures compiled by Ebasco's corporate finance department show that, of the \$5 billion offered in new securities, electric and gas utility companies were involved in financings totaling about \$3.75 billion.

Ebasco foresees a slight decline in the amount of new securities to be offered during 1959, but expects utility financings in

the 1960's to exceed substantially the 1958 peak.

The long-range utility financings also will include substantial amounts of refunding. In the late 1960's and mid-1970's, these refundings, together with the need for financing the anticipated heavy construction, will result in more and substantially larger security issues going on the market.

Highlights of cases before the Federal Power Commission

Bureau of Statistics, American Gas Association

Certificate cases

● **Columbia Gulf Transmission Co.** has been authorized to construct and operate 11 miles of 12-inch lateral supply line at an estimated cost of \$820,000. The new line, with appurtenant facilities, will transport natural gas purchased by United Fuel Gas Co. from Shell Oil in the Block 17 Field, Cameron Parish, La.

● **El Paso Natural Gas Co.** has received temporary authority to construct and operate an additional 2,200 horsepower to its Eunice Field compressor station, at a cost of about \$867,000. These facilities will enable the company to purchase 17.4 million cubic feet of residue gas daily from producing areas in Lea County, N. M.

● **Michigan Wisconsin Pipe Line Co.** has been granted temporary authority to construct, but not to operate, about \$31.2 million of natural gas facilities in Illinois, Iowa, Kansas, Michigan and Missouri. The authorization includes nearly 353 miles of 24-inch pipeline loops and 16,560 horsepower in additional compressor capacity. These facilities are instead of nine intermediate mainline compressor stations which were authorized on June 20, 1958. The facilities, already constructed under the previous authorization at a cost of nearly \$6 million, together with the current authorization, are sufficient to transport 80 million cubic feet of natural gas daily from Laverne Field, Okla., where 632 billion cubic feet of recoverable reserves are under contract to the company.

● **New York State Natural Gas Corp.** has

been authorized to construct and operate about 27 miles of 20-inch pipe to take gas produced in the Luthersburg Field, Clearfield County, Pa. These facilities will cost an estimated \$1.5 million.

● **Pacific Gas Transmission Co.** has filed an application seeking authorization to construct and operate a 36-inch pipeline for 614 miles between the Canadian border near Eastport, Idaho, and the California border near Klamath Falls, Ore. The proposal, including 27,500-compressor horsepower in three stations, and other appurtenant facilities, is expected to cost about \$130 million. The applicant is one of several companies in a project sponsored by **Pacific Gas and Electric Co.** to purchase and transport Canadian natural gas for central and northern California markets. Pacific Gas and Electric, which is a 50 per cent owner of the new transmission company, will construct a line from the Oregon terminus to the market area. Alberta and Southern Gas Co., Ltd., a wholly owned Canadian subsidiary of Pacific Gas and Electric will purchase gas to be transported to the Alberta-British Columbia boundary. This gas will then be transported to the Canadian border by a newly formed pipeline company, Alberta Natural Gas Co., in which Pacific Gas Transmission owns one-third of the common stock.

● **Tennessee Gas Transmission Co.** has been granted a permanent certificate for the construction and operation of 1,072 miles of pipeline and 104,250 horsepower in compressor capacity at an over-all cost of \$169 million. These facilities are designed to raise delivery capacity by 406 million cubic feet of natural gas daily for the benefit of existing customers. The authorization recommended that the company include, in its next major certificate application, a proposal to supplant the present peak service arrangement for serving the New England states with a new service similar to the one in effect in the New York zone. This change would involve the full incorporation of underground storage facilities into the overall operation of the pipeline system. The present peaking service has been in effect since the winter of 1955-56, and has continued under temporary authorizations granted at the beginning of each heating season. Another major issue was the proposal to cancel precedent service agreements with four subsidiaries of Consolidated Natural Gas Co., as a result of the Memphis decision. The reversal of the Memphis decision has effectively removed all obstacles and uncertainties conducive to contract cancellation. In still another major issue, "Sellers Option Service," the company would be required to file satisfactory rate schedules which include the addition of new facilities in its rate base. Under this type of contract, there is no daily obligation to deliver; rather, there is only an annual obligation. In order to change to contract demand serv-

ice, necessary applications must be filed within 90 days.

● **United Gas Pipe Line Co.** has been authorized by a presiding examiner's decision, which was subsequently adopted by the FPC, to construct pipeline facilities which will enable it to make direct industrial sales of natural gas. The authorization includes facilities with a total cost of \$1.5 million, and with no single project to cost more than \$400,000. These facilities will enable the company to make direct industrial sales of nearly 26 billion cubic feet during 1959. To meet objections of intervening coal interests, no sales of gas for boiler fuel in generating electricity can be made.

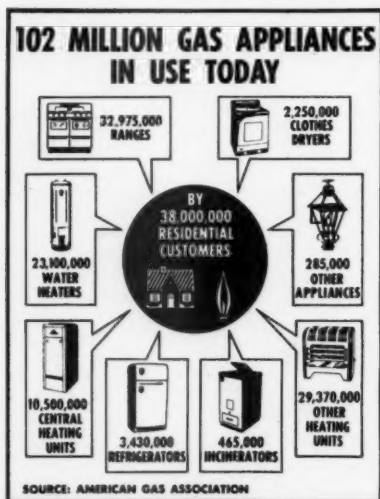
Rate cases

● **El Paso Natural Gas Co.** has applied for a \$26.5 million, or 13 per cent, annual natural gas rate increase which would affect 34 wholesale customers in Arizona, California, New Mexico and Texas. The proposed increase, which became effective on Feb. 12, was based upon higher cost of purchased gas. El Paso Natural Gas has been collecting, subject to refund, a \$17.9 million increase since April 1955, and a \$16.5 million increase since Jan. 1, 1957.

● **Michigan Wisconsin Pipe Line Co.**'s proposal to substitute a demand commodity form of rate for a straight commodity form of rate has been suspended until April 1, 1959. The new rates, subject to refund provisions, will affect 21 wholesale customers in Illinois, Iowa, Michigan, Minnesota, Missouri and Wisconsin. The FPC stated that, in support of these proposed revisions, Michigan Wisconsin has submitted a cost of service study which contains several questionable items, including rates subject to refund of one of its suppliers, working capital credit for income tax accruals, a 6 1/2 per cent rate of return instead of the 6 per cent currently allowed, related income taxes, and test year sales figures. The FPC also noted that, under the two-part rate as proposed, the maximum average rate would be 37.5 cents, the same as is now being collected, subject to refund, in a prior proceeding involving a \$2.8 million annual increase suspended in March 1957.

● **North Penn Gas Co.** has filed an application requesting a \$389,000, or 8.5 per cent, annual wholesale natural gas rate increase, in addition to a suspended increase of \$393,000 being collected subject to refund. The proposed increase would affect six wholesale customers in New York and Pennsylvania. Higher prices for purchased gas, and a 6.5 per cent rate of return, are reasons for the latest plea.

In other FPC actions, Michigan Wisconsin Pipe Line Co. was directed to supply



More than \$19.5 billion in gas appliances (102 billion units) are used in the United States. Some 38 million gas-using families—29 million with utility gas and the rest with LP or bottled gas—average about three appliances each

sufficient natural gas to nine wholesale customers, in order to enable them to add 30,957 space-heating consumers who are expected to use five billion cubic feet annually. The company was also ordered to deliver 58 million cubic feet annually to Northern Illinois Gas Co. for resale in Earlville, Ill. The request from the city of Bethany, Mo., for natural gas service was denied. Michigan Wisconsin, however, was ordered to reserve temporarily 255 million cubic feet annually for Bethany, pending an opportunity afforded the city to overcome deficiencies in its showing. Applications by Iowa Electric Light and Power Co., Northern Indiana Public Service Co., and Ohio Valley Gas Co. seeking natural gas from either Michigan Wisconsin or American Louisiana Pipe Line Co. were denied. The Commission also denied a proposal to allocate 10 million cubic feet of natural gas out of 40 million available from the Laverne Field to Michigan Consolidated Gas Co., because other customers' needs are more pressing. A 25-mile loop line and a 1,200-horsepower compressor station in Wisconsin, at an estimated cost of \$1.4 million, were authorized. The Commission denied \$1.2 million in additional compressor capacity, stating that Michigan Wisconsin had not shown that it has a sufficiently firm annual gas supply to warrant these facilities.

In a decision filed by an FPC presiding

examiner, Mississippi River Fuel Corp. was ordered to supply gas to Illinois Power Co. for delivery to O'Fallon, Millstadt, and Hamel, Ill.; to make deliveries to Chester, Ill.; and to increase deliveries to the St. Charles Gas Corp. in Missouri. The maximum deliveries to these communities will total nearly 4.1 million cubic feet daily.

In another decision filed by an FPC presiding examiner, Panhandle Eastern Pipe Line Co. was authorized to terminate a natural gas exchange agreement with Cities Service Gas Co., and was required to continue to supply a maximum of 15.4 million cubic feet daily to The Gas Service Co., also a customer of Cities Service Gas. The release of this previously committed capacity will now enable Panhandle Eastern to render more adequate service to its own present and future customers.

The FPC has denied a proposal by Transcontinental Gas Pipe Line Corp. to provide a transportation service for Consolidated Edison Co. of New York, Inc., and a request to order Transcontinental Gas to sell gas to Lynchburg Pipe Line Co. for resale to an industrial user. In the transportation decision, the Commission indicated that distributors who seek field sources of gas, instead of relying on pipeline companies, run the risk of sharply bidding up field prices in competition with pipeline buyers. In the Lynchburg Pipe Line refusal, the Commission stated that, in any

SUMMARY OF INDEPENDENT GAS PRODUCER RATE FILINGS—DECEMBER 1958

	Number	Annual Amount
Tax rate increases allowed without suspension	7	\$ 95
Other rate increases allowed without suspension	206	4,042,590
Rate increases suspended	206	6,836,303
Total rate increases	419	10,878,988
Tax rate decreases allowed without suspension	8	689
Other rate decreases allowed without suspension	1	81,488
Total rate decreases	9	82,177
Total rate filings	2,137	—
Total rate filings acted on from June 7, 1954, to Dec. 31, 1958	35,393	—
Rate increases disposed of after suspension (during December)	2	26,040
Amount allowed	2	26,040
Amount disallowed	—	—
Amount withdrawn	—	—
Rate increases suspended and pending as of Dec. 31, 1958	2,034	\$88,798,956

project involving potential industrial consumers, relatively firm commitments should be required from such customers. In this case, the FPC said, such commitments were lacking. Furthermore, the present supplier, Atlantic Seaboard Corp., opposed the proposal.

Southern California Gas awards contract for new operating base

THE CONTRACT for construction of a \$125,000, ultra-modern operating base for Southern California Gas Co. in Canoga Park has been awarded to C. T. De Cincos, San Fernando Valley contractor. Work will begin immediately.

The base, which will include several separate buildings architecturally tied together to form a single unified operating unit, will be built on a 3.77-acre site. When completed, it

will represent a total investment in land and improvements of \$235,000.

Design of the all-brick and glass structures was executed by Larsen Associates. The buildings feature vertical and horizontal planes of brick and glass in a geometrical pattern. Extensive landscaping will be done around the site.

This base, which will serve the West Valley area, was purchased in 1956. When com-

pleted, it will augment present operating facilities at the company's Saticoy and North Hollywood bases. The new base will be staffed by personnel from the customer service, distribution, and special services departments. Facilities will include an operations building, storeroom, repair garage and storage shelters for automotive equipment, a gasoline service station, and pipe storage racks.

Consumers' Gas of Toronto buys Peterborough's gas system

CHECKS TOTALING \$1,241,300 have been presented by Oakah L. Jones, vice-president and general manager, The Consumers' Gas Co. of Toronto, to Mayor Donald Loucks of Peterborough, Canada, for that city's propane gas system, which has been bought by Consumers' Gas.

Peterborough citizens voted last November to sell the municipally owned gas system to the company, and, thereby, to reject public ownership.

The 19-mile transmission line, which branches off the Lindsay line at Highway 35, was completed in mid-February. The construction provided winter employment for some 300 men.

A complete physical survey of lines, appliances and gas-burning equipment is currently being conducted in Peterborough.

Final inspection of meters by the Peterborough Utilities Commission took place during February. Customers received their first Con-

sumers' Gas billings in March. These billings, which are for propane air gas, are being charged on an equivalent natural gas rate, which is about 25 per cent lower.

At the check presentation ceremony, Consumers' Gas was represented by F. Warren Hurst, comptroller; Charlie World, manager, east central region; Robert Carley, attorney; and Mr. Jones. Peterborough was represented by Mayor Loucks; E. A. Outram, city clerk; and Don Hills, treasurer.

Waste King acquires operating control of Cribben and Sexton

WASTE KING CORP., Los Angeles, has acquired a controlling interest in Cribben and Sexton Co., Chicago.

Waste King has obtained 156,552½ shares of Cribben and Sexton's common stock, following an offer to the Chicago company's shareholders. Waste King now has 67 per

cent of Cribben and Sexton's voting shares.

The shares were acquired on the basis of one share of Waste King's common stock, plus \$12.50, for each two shares of Cribben and Sexton's common. There are 193,100 shares of Cribben and Sexton common stock and 40,000 shares of its preferred stock.

Bertram Given, president of Waste King, said that Cribben and Sexton will be operated as an autonomous company, and will be headed by Wendell C. Davis, the current president, who will retain that title. There will be no changes in the Cribben and Sexton staff.

Book on tree maintenance shows natural gas as nontoxic to trees



Dr. P. P. Pirone examines a London Planetree said to have been damaged by escaping natural gas. After careful study, Dr. Pirone found that *Ceratocystis fimbriata*, a fungus which causes the fatal cankerstain disease, was responsible for the tree's poor health. (Photo by Douglas Eastman)

THE EFFECTS OF NATURAL GAS on vegetation are discussed in "Tree Maintenance," a new text by Dr. P. P. Pirone.

"Tree Maintenance" is a complete revision of Dr. Pirone's "Maintenance of Shade and Ornamental Trees," which was originally published in 1941. The present text contains a great deal of Dr. Pirone's recent research on the effects of natural gas on trees, from which he has concluded that natural gas is not toxic to trees.

Dr. Pirone is plant pathologist for the New York Botanical Garden. For the past 12 years, he has been responsible for the health of more than 10,000 different kinds of trees, shrubs and flowers grown both outdoors and under glass.

Previously, Dr. Pirone was associate professor of plant pathology at the New Jersey Agricultural Experiment Station at Rutgers University, where he conducted research on diseases of trees, shrubs and herbaceous plants. He was also on the Cornell University plant pathology staff. Dr. Pirone is consultant on landscape maintenance for United Nations headquarters in New York.

"Tree Maintenance" was published by Oxford University Press, New York.

New Jersey Natural Gas to install New Univac Computer in October

NEW JERSEY NATURAL GAS CO. will install the New Univac Computer—the first magnetic amplifier, solid-state commercial data-processing system in actual operation—in October.

A contract has been signed with the Remington Rand division of Sperry Rand Corp. for delivery of the computer, which was introduced on the market in January. The computer, which will be installed at the gas company's Univac computing center, will replace the present Univac 60 system.

All data processing functions will be transferred, one by one, to the new computer. It is estimated that the all-electronic system will be in full operation by December 1960.

Dale B. Otto, president, New Jersey Nat-

ural Gas, said, "Our growth and its subsequent paper work have been phenomenal. We had to take advantage of the increased speed and capacity of the New Univac Computer. It offers us the best means of handling the billowing amount of data processing inherent in our expanding operation. . . ."

At the time of its formation in 1953, New Jersey Natural Gas processed its data with tabulating equipment. In 1956, the company installed the Univac 60. The company now has some 130,000 gas meters in its territory.

The new computer, which utilizes magnetic cores, Ferractor amplifiers, and transistors to effect substantial economy in production and maintenance costs, is comprised of four units: a central processor, a high-speed card reader,

a read-punch unit, and a high-speed printer.

Card reading on both the card reader and the read-punch unit, as well as punching on the read-punch unit and processing within the central processor, take place simultaneously.

The new computer can make more than 10,000 additions or subtractions per second. It also performs other operations, such as divisions, multiplications, comparisons, and data transfers. In addition, it has a large capacity for memory storage: 50,000 characters of information, either alphabetic or numeric. Solutions to problems, which can be achieved with one run through the computer, are printed out at the rate of 600 lines per minute.

ASA approves standard on refrigeration terms and definitions

AMERICAN STANDARD B53.1-1958, Refrigeration Terms and Definitions, has been approved by the American Standards Association and published by The American Society of Refrigerating Engineers.

The standard provides authoritative definitions of words and terms employed in all phases of activity connected with refrigeration and air conditioning. It also contains an index to classifications, an alphabetical in-

dex, and classified words and definitions.

It is hoped that the standard will bring about a more logical and consistent use of refrigeration terminology, serve as an authority on word meaning in specification and allied writing, compare meanings of closely related words, be a vocabulary source for technical writing, and provide a classification system which may be useful in other aspects of refrigeration work.

The standard was sponsored by The American Society of Refrigerating Engineers, and was developed under the auspices of the ASA by Sectional Committee B53.

American Standard B53.1-1958 is available at \$1.25 per copy from the ASA, Department PR43, 70 East 45 Street, New York 17, N. Y., or from The American Society of Refrigerating Engineers, 234 Fifth Avenue, New York 1, N. Y.

Philco Corp. develops compact combination washer-dryer

PHILCO CORP. has developed the smallest combination washer-dryer unit ever put on the market.

Called the 790 Series Duomatic, the machine is described as compact enough to be

"installed right in the kitchen and priced within the reach of nearly every family."

The fully automatic combination gas unit is 26¾ inches wide, 26¾ inches deep, and 36 inches high.

It is the result of a two-year Philco development program; more than \$2 million in research, design and tooling costs; and a large investment in automatic production facilities.

Michigan Consolidated conducts sales promotion program

WE'VE GOT THE BEST equipment in the world to sell; so let's take a good look at the 'equipment' we use to sell it—ourselves."

Thus spoke Fred A. Kaiser, vice-president and general sales manager, Michigan Consolidated Gas Co., when he recently stepped up the company's sales promotion program for everyone connected with gas appliances in the utility's service area.

The company has conducted three major programs recently, in order to help utility sales people, appliance dealers, department store staffs, and builders to perfect their sales techniques and catch up with the latest information on appliances.

Early in January, the company held two three-day seminars, at which some of the nation's leading sales speakers were featured. One seminar was held in Detroit for 500 appliance people from both that area and Ann Arbor.

The second was held in Grand Rapids for 200 salesmen from all over northwestern Michigan.

Dale Madden, general manager of the

Leadership Training Institute of Detroit, and one of the main speakers, covered a variety of subjects on basic sales training. He also moderated brain-storming sessions on subjects ranging from why people do buy to why they don't.

Dr. Wm. Clyde Donald, theologian and lecturer, and pastor of Detroit's Bethel E. and R. Church, gave a talk entitled, "Enthusiasm Can Do Wonders."

Speakers on various gas appliances included William Roddy, manufacturers representative, Locke Stove Co.; Lou Snyder, general sales manager, and Tom Bartley, range sales manager, Whirlpool Corp.; Michael Wahl, vice-president and general sales manager, Durant and McAlpine, Inc.; Paul Williams, district manager, Arkla Air Conditioning Corp.; D. C. McDermand, sales promotion manager, Hamilton Manufacturing Co.; and Ed Soby, market development manager, Rheem Manufacturing Co.

Last December, some 500 Detroit architects, builders, kitchen modernizers, and their sales personnel attended the company's sci-

ence show, "Gasarama," and a perfect fuel demonstration.

"Gasarama," which the company developed to create interest in science education among high school students, has also proved to be an effective sales tool, particularly in the area of demonstrating that the natural gas industry is research-minded and always looking for new developments. The presentation shows the role which science plays in the discovery and development of natural gas, and describes the transmission, distribution, and uses of the fuel.

Milton Elert, dealer sales coordinator for Michigan Consolidated, presented the perfect fuel demonstration. He performed tricks and skits while offering this thought: "Everyone is a potential buyer, and it is the primary purpose of these meetings to sow the seeds of creative selling among our own employees, suppliers, dealers, and appliance outlets. As soon as salesmen begin to dig for buyers, our local and national business indicators will begin to climb. Nothing good can happen to anyone until after a sale is made."

Homemakers suggest refrigerator improvements, discuss ranges

THE 100 HOMEMAKERS who attended the second annual Congress on Better Living, sponsored recently by *McCall's* magazine in Washington, D. C., offered suggestions for redesigning refrigerators, and expressed the majority opinion that a controlled heat unit or burner would be a must on any range bought within the next three years.

These women, who were selected as delegates by the magazine for their "knowledge of and interest in homemaking," represented all 49 states.

Suggestions for improvements of new refrigerators included:

- have less freezer space, or none at all, in some refrigerators, so that someone with a separate freezer does not have to give up refrigerator space for the unnecessary freezer compartment;
- add a controlled temperature section for thawing meat for use within 24 hours, because the freezer is too cold and the refrigerator is too warm;
- have separate controls for the freezer and refrigerator sections, so that the freezer can be really cold;
- build the refrigerator less deep and wider, so that some items need not be buried in the back and out of easy reach;
- have shelves which are easy to remove and replace and which can be raised or lowered;
- have the roll-out shelves balanced more securely, because some have a tendency to tip when loaded at the front;
- eliminate wire shelves, so that, when something on the top shelf spills, it is not necessary to clean the entire refrigerator;
- move the vegetable drawers higher up in the refrigerator for more convenience and less frequent bending;
- eliminate the many special compartments, such as egg trays and soft drink sections, and give more over-all room; and

- eliminate raised letters for the manufacturer's name on the refrigerator, because these letters are difficult to clean.

In the opinion survey on ranges, eight out of 10 women registered the preference for controlled heat on new ranges. One-fourth of all the delegates noted that they already owned controlled heat units. More than six out of 10 said that they used electric ranges; the rest reported owning gas ranges.

Comments about the heat control units on ranges included:

- the control unit should employ temperature degrees, instead of specially marked

dials, because degrees are more easily understood, and are generally used in present-day cookbooks;

- special heat control units which do not have degrees are easier to use, because many women who do not fully understand the concept of degrees do understand the difference in levels of heat;

- heat control units eliminate the need for constant watching of the range, because nothing can spill or run over.

McCall's recorded 4,263 pages of comments from the women during the three-day conference. These comments will eventually be available through the magazine.

A. G. A. committee approves two papers



At its Feb. 2-3 meeting in Mobile, Ala., the Chemical Processing Committee of A. G. A.'s Industrial and Commercial Gas Section approved for publication two information letters, entitled "Spray Drying in the Chemical Industry" and "Still and Tubular Heaters and Their Applications in the Chemical Industry." Present at the meeting were (l. to r.) W. M. Stephens, E. J. Funk, Jr., N. E. Keith, R. A. Sundling, R. H. Murray, H. E. Frome (chairman), R. T. Ellington, L. F. Willmott, and R. L. French

A. G. A. approves Kirk Industries' refrigerator



The Kirk 10.2 cubic foot refrigerator, recently approved by A. G. A., is examined by (l. to r.) Russel Wright, designer of the refrigerator-table; and Kirk C. Kirkorian and L. J. Jiskoot, Kirk executives

KIRK INDUSTRIES, Inc., a new Connecticut firm, has developed a standard-size gas refrigerator for home use. The appliance has received the approval of the A. G. A. Laboratories.

The 10.2 cubic foot refrigerator is the result of four years of research. It will be marketed through natural gas companies and LP-Gas distributors.

President of the firm is Kirk C. Kirkorian, and chairman of the board is L. J. Jiskoot. The Kirk plant in South Norwalk currently has 60 employees. According to Messrs. Kirkorian and Jiskoot, facilities are being expanded, and the company expects to employ some 200 people in the near future.

The company is presently working on models of from 5.5 to seven cubic feet and of 14 cubic feet, as well as on a line of freezers and beverage coolers.

Other Kirk executives are George Brown, works manager, and Walter Steiner, sales director.

A. O. Smith expands

OPERATION MUSCLES," a \$5 million expansion and modernization program of production facilities, has just been completed by the Permaglas division of A. O. Smith Corp.

The division produces commercial and domestic glass-lined water heaters, water storage tanks, residential heating and cooling equipment, water softeners, and glass-lined storage structures for farm and industry.

Included in the expansion program were a \$550,000 office addition, a \$115,000 warehouse, a \$105,000 research and test facility, and various modernizations and additions to existing manufacturing plants, all in Kankakee, Ill.; and acquisitions of a water softener plant in Omaha, and a water heater production plant in another marketing area.

According to J. H. Brinker, vice-president, the expansion program was designed to make the Permaglas works one of the most modern in the country, and to enable the company to keep up with increasing sales.

New El Paso medical building to be cooled and heated by gas

EL PASO'S NEWEST and most modern medical building, the University Towers, will be both cooled and heated by gas-fired equipment manufactured by York Corp. Fuel for the new building, which is now under construction, will be supplied by Southern Union Gas Co.

The \$1.5 million, six-story structure, which has been designed by Garland and Hillis, El Paso architects, and is being built by Morley Construction Co. of Los Angeles, Calif., is scheduled for completion this August. The

first floor will house a pharmacy and other commercial establishments; the upper five floors will be made up entirely of individual medical suites.

The entire building, which will contain some 60,000 square feet of floor space, will be cooled by a single 169-ton York gas-fired absorption unit located on the roof. The unit will be able to provide cooling power equal to that furnished by approximately 338,000 pounds of ice melting in 24 hours. Other equipment located on the roof will be the

cooling tower and the low-pressure steam boiler which will generate steam to operate both the heating unit and the absorption cooling equipment.

Each suite in the building will be able to control its own temperature by means of a wall thermostat. The air will be filtered, cooled or heated, and then distributed to each room through small slots in specially designed acoustical ceiling tile which will be furnished by Southwest Acoustics Co. of El Paso.

250,000 people see gas industry exhibit at Pennsylvania farm show

THE RECENT 43RD ANNUAL PENNSYLVANIA State Farm Show featured an institutional gas industry display. The exhibit was a result of the joint efforts of the members of both the Pennsylvania LPGA and Liquefied Petroleum Gas Association and the Pennsylvania Gas Association.

The theme of the 20-by-50-foot display was "Look What GAS Is Doing." Twenty-four

manufacturers contributed to the display. The appliances were displayed by type, rather than by brand, in order to illustrate what gas in general can do for the consumer. Since gas appliances used for industry or agriculture were too large to be exhibited, pictures of them were displayed instead.

More than 100 LP-gas and utility gas men manned the display in shifts. There were al-

ways at least six men on duty to discuss gas. It is estimated that some 250,000 people visited the display. In order for each of the participating companies to be identified for the public, a hand-out list, entitled "Gas is available in all 67 counties in Pennsylvania," was distributed at the display. The list contained a county-by-county breakdown of the state's gas and LP-gas companies.

Southwestern Gas Measurement course set for April 14-16

THE 34TH ANNUAL Southwestern Gas Measurement Short Course will be held from April 14-16 at the College of Engineering of the University of Oklahoma, Norman, Okla.

W. H. Carson, dean of the College of Engineering and chairman of the executive committee of the course, has announced that the subcommittee chairmen for this year's course

are R. R. McCafferty, Pioneer Natural Gas Co., program subcommittee; Howard S. Gray, Tennessee Gas Transmission Co., publications subcommittee; Charles R. Stephenson, Michigan-Wisconsin Pipe Line Co., practical methods and registration subcommittee; William R. Ruff, Jr., Southern Natural Gas Co., exhibits subcommittee; Thelma T. Jones, Oklahoma Utilities Association, publicity sub-

committee; and Charles D. Peterson, Universal Controls Corp., exhibitors subcommittee.

Some 90 persons have been selected from universities and gas and gas equipment manufacturing companies to teach the course. Some of the subjects to be considered will be the fundamental problems of the man in the field, shop practices, and engineering applications.

Heating-air conditioning and refrigerating engineers' societies merge

THE AMERICAN SOCIETY of Heating and Air-Conditioning Engineers and The American Society of Refrigerating Engineers have announced their merger into the new American Society of Heating, Refrigerating and Air-Conditioning Engineers.

The consolidation went into effect on Jan. 29. The new society has more than 18,000 members.

New officers of the society are Cecil Boling, president; Arthur J. Hess, first vice-president; Daniel D. Wile, second vice-president;

Walter A. Grant, third vice-president; Robert H. Tull, fourth vice-president; John Everetts, Jr., fifth vice-president; John H. Fox, first treasurer; Franklyn Y. Carter, second treasurer; and A. V. Hutchinson, executive secretary.

Patent issued for automatic utility meter-reading system

A PATENT WAS ISSUED in January for a mechanical system which reads utility meters automatically by telephone and then feeds the readings into a billing machine.

The inventor of the system is Curtis M. Cooper, a television serviceman in Binghamton, N. Y. He was assisted in its development by his uncle, W. Arthur Sprague, head of general accounting for New York State Electric and Gas Corp.

The new system works this way:

A utility's office would prepare a group of cards, each punched with a customer's telephone number and his preceding month's meter reading. Each card would be fed into a sending machine, and would dial the customer's telephone, but not ring the bell. The connection would then open a circuit to the customer's meter. The reading would be sent back by electric pulses and punched into the card. The card would subsequently move along to the computing and billing machine,

and a new card would be prepared for the following month.

According to the patent, No. 2,870,258, the operation is quick, and can be performed after midnight, when there is little telephone traffic. If a dialed number is busy, the card is put aside and fed in again when the line becomes free. It is expected that one clerk could handle all the cards under this system.

Mr. Cooper is a partner in the Holloway-Cooper Television Service in Binghamton.

Canadian company uses electronic gas flow computer

NORTH CANADIAN OILS, Ltd., Calgary, Alberta, has announced the use of an electronic flow computer for natural gas measurement. The Flow Measurement System, manufactured by Computers, Inc., Houston, Texas, is believed to be the first of its kind used in Canada.

The system was tested for 30 days last November by North Canadian Oils in its North

Western Pulp and Power, Ltd., gas meter station in Hinton, Alberta. During the test, the computer was checked by two calibrated mercury-type orifice meters which are used presently at the station to record gas flow to the pulp mill.

The computer's results were found to be within 0.05 per cent of the average flow computed by the two flow meters for the

30-day period on a total flow of more than 280 million cubic feet.

The measurement system is now at the Dominion Government Bureau of Standards testing laboratories in Ottawa for approval as a sales measuring system in Canada. Upon receipt of this approval, the orifice-type meters will be replaced at the Hinton station by the new computer.

Two Brooklyn gas companies seek merger

THE BOARDS OF DIRECTORS of The Brooklyn Union Gas Co. and Brooklyn Borough Gas Co. have approved a consolidation of the two companies. The merger would be on the basis of three-quarters of one share of Brooklyn Union common stock for one share of Brooklyn Borough. The preferred stock of Brooklyn Borough would be retired before the consolidation.

The proposed merger is now subject to the approval of the stockholders of both companies and the Public Service Commission of the State of New York. It is intended that, after the consolidation of Brooklyn Borough

with Brooklyn Union, the continuing company would be Brooklyn Union.

The consolidated company would serve the entire boroughs of Brooklyn and Richmond, and part of the borough of Queens. The consolidation is described by the directors of both companies as fair and acceptable to both groups, and in the interests of both the companies' own consumers and the general public.

The proposed merger was announced jointly by John E. Heyke, president, Brooklyn Union, and Walter M. Jeffords, president, Brooklyn Borough.

LILCO expands

CONSTRUCTION EXPENDITURES totaling some \$45 million are expected to be made in 1959 by Long Island Lighting Co. in the development of its electric and gas system.

The company expects to spend \$33 million of this total on electric production, transmission and distribution facilities; \$8 million on gas mains, services and meters; and \$4 million on common plant items, such as the western Suffolk division headquarters now under construction at Brentwood in Suffolk County. The \$8 million allocated to the gas system is for larger distribution mains.

Company moves offices

TEXAS EASTERN TRANSMISSION CORP. has moved the offices of several executives from Shreveport, La., to the Memorial Professional Building in Houston, Texas. Those officials involved in the change are Robert J. Fitzpatrick, director of public relations; J. E. Bixby, treasurer; J. W. Hargrove, financial vice-president and secretary; S. L. Robertson, Jr., assistant secretary and assistant treasurer; and Leon M. Sipes, manager of publications.

Division sets safety records

THE EMPLOYEES of the Sacramento division of Pacific Gas and Electric Co. have won three awards for setting outstanding accident prevention records. An average of 828 employees in all departments of the division worked three million man-hours over a period of more than two years without any injuries which caused a loss of time. In addition, the division received awards for completing its second consecutive year of accident-free work and for establishing the best safety record of any of the company's 13 divisions.

North Carolina gas companies meet



Participants in an informal conference during a recent meeting of the eight North Carolina natural gas transmission and distribution companies are (l. to r.) Buell G. Duncan, president, Piedmont Natural Gas Co., Inc.; Luther H. Hodges, governor of North Carolina; and Julius Klein, president, Caloric Appliance Corp. The state-wide, one-day, industry meeting was held in Philadelphia

Smith replaces Horton as vice-president and manager of Alberta and Southern Gas

CHARLES PENNYPACKER SMITH has been named vice-president and manager of Alberta and Southern Gas Co., Ltd., a Canadian firm which obtains natural gas supplies for transmission to the California market. He succeeds J. K. Horton, who has become president of Southern California Edison Co. Mr. Smith was also elected a

member of Alberta and Southern's board of directors.

Alberta and Southern is one of three companies created by Pacific Gas and Electric Co. to develop a 1,300-mile, \$333 million pipeline project. The others are Alberta Natural Gas Co. and Pacific Gas Transmission Co. Mr. Smith was also named vice-

president and manager of Alberta Natural Gas.

Mr. Smith joined Pacific Gas and Electric in 1937. He was named chief gas dispatcher in 1943, and became supervising gas supply engineer in 1954. He was appointed manager of operations for Alberta and Southern in 1957.

Personal
and
otherwise

Wade named vice-president of Memphis utility



Neander W. Wade

NEANDER W. WADE has been elected vice-president of the Memphis Light, Gas and Water Division, Memphis, Tenn., by that city's Board of Light, Gas and Water Commissioners. Mr. Wade was previously secretary of the utility.

During the 1930's, Mr. Wade was secre-

tary of the now defunct City Water Board in Memphis. After that organization was consolidated into the joint division, Mr. Wade became secretary of the new group.

Mr. Wade, who is active in the affairs of A. G. A.'s Accounting Section, is a past chairman of its Accounting Employee Relations Committee. He is also active in A. G. A.'s General Management Section.

Members of the Board of Commissioners—Ray Morton, president, T. Walker Lewis, Ira J. Lichterman, Horace Hull and Mr. Wade—are expected to select a new secretary for the division in the near future.

J. Luther Davis elected president of Tucson Gas, Electric Light and Power Co.

JLUTHER DAVIS, 34, became one of the youngest company presidents in the utility industry when he was promoted to that office by Tucson Gas, Electric Light and Power Co.

He succeeded J. R. Snider, who retired on Feb. 1, after having served as president for

13 years. Mr. Snider will continue as chairman of the company in a consulting capacity.

In 1952, after two years in private law practice, Mr. Davis became assistant city attorney in Tucson. He was advanced to city manager in 1953.

In 1955, Mr. Davis resigned to become assistant to Mr. Snider at Tucson Gas, Electric Light and Power. Mr. Davis was named vice-president in 1957 and executive vice-president in 1958.

Mr. Davis is a member of A. G. A.

Roberts succeeds Jenny as Pacific Gas and Electric rate department manager

JOHAN F. ROBERTS, JR. has become manager of the rate department of Pacific Gas and Electric Co. He succeeds Rudolph Jenny, who has retired after 47 years.

Mr. Roberts joined the company in 1937, and became assistant rate manager in 1953.

Mr. Jenny started with the utility in 1912 as Napa district office manager. He later transferred to the main office, where he was an accountant. He became rate manager in 1948.

Prior to joining Pacific Gas and Electric,

Mr. Roberts assisted in the design and construction of equipment used in the experimental Guayule rubber station near Salinas, Calif. He also participated in the design of automatic devices for agricultural packing operations.

Hope Natural Gas names Kinley, Swing vice-presidents

WALTER M. KINLEY AND LEONARD C. SWING have been named vice-president-administration and vice-president-engineering, respectively, for Hope Natural Gas Co. Both men were also elected to the board of directors.

Mr. Kinley began his career with Hope Natural Gas in 1924. He became assistant

statistician in 1936, chief statistician in 1943, assistant treasurer-financial in 1949, and executive assistant to the president in 1958.

Mr. Swing joined the company in 1936 as an engineer. He later became a chemist. He was named general foreman in charge of construction in 1953, and construction superintendent in 1957.

Yetter, Sargent promoted

PUBLIC SERVICE CO. OF COLORADO has announced two personnel changes. Paul A. Yetter has been advanced from vice-president of division operations to vice-president in charge of public relations activities. Ralph Sargent, Jr., has been named manager of division operations, succeeding Mr. Yetter. Mr. Sargent has served as assistant to the president since 1956. Mr. Yetter will be in charge of the company's advertising, employee, and public information departments.

Washington Jaycees name Boothby as Boss of Year

EVERETT J. BOOTHBY, chairman of the board, Washington Gas Light Co., has received the annual Boss of the Year Award from the Washington Junior Chamber of Commerce.

The award was presented on Bosses' Night in January, during the week-long observance of the 40th anniversary of the founding of

the United States Junior Chamber of Commerce.

Donald West, chairman of the week's commemorative activities, described Mr. Boothby as "an outstanding example of a boss who not only supports and recognizes the value of Jaycees, but guides a progressive, community-minded organization."

Probst named vice-president

ROBERT F. PROBST, secretary, The Connecticut Light and Power Co., has been elected a vice-president. He will continue to serve as secretary. Mr. Probst joined the company in 1923. He was elected assistant secretary in 1942, and secretary in 1951.

Olson retires as vice-president, director of Columbia Gas; Baldridge becomes director



H. E. Olson



Milton C. Baldridge

H. EDWIN OLSON, vice-president and director, The Columbia Gas System, Inc.,

has retired after 30 years. During his career with Columbia, he served in various accounting and financial positions.

In another development, Milton C. Baldridge, secretary of the system, has been elected to the board of directors. Mr. Baldridge joined the system in 1937.

Mr. Olson joined Columbia as assistant treasurer in 1928. He had previously been auditor for National Electric Power Co., and assistant auditor for American Gas and Electric Co.

Mr. Olson served for several years as secretary of the corporation. He also served on the boards of directors of most of Columbia's subsidiaries. He is a member of both A. G. A.

and the Controllers Institute of America.

Throughout his career in the legal field, Mr. Baldridge has specialized in public utility operations. After joining Columbia, he served for four years in the corporate legal department.

In 1941, he was named assistant secretary of The Columbia Gas System Service Corp. He subsequently was elected secretary. In 1957, he was elected secretary of the system. He has also served as assistant secretary and secretary of other Columbia companies.

Mr. Baldridge is a member of the Association of the Bar of the City of New York, the American Bar Association, and the Federal Power Bar Association.

Western Gas Service promotes Dan L. Hill, James King and Raymond P. Bowie

DAN L. HILL, JR., has been named executive vice-president and general manager of Western Gas Service Co. In other developments, James King was promoted to manager of operations, and Raymond P. Bowie was appointed manager of the company's newly formed El Paso division.

Mr. Hill, who was previously vice-president and general manager, has been with the company for 22 years. He joined Lea County Gas Co. in 1937 as a member of the account-

ing department. He subsequently became chief clerk, secretary and treasurer, vice-president and treasurer, and, in 1955, vice-president and general manager. Lea County Gas Co. was formerly the corporate name of Western Gas Service Co.

Mr. Hill is a member of A. G. A. and several of its committees. He is also a member of the Southern Gas Association.

Mr. King joined the company 14 years ago as an industrial engineer. He later served as

a district manager, chief engineer, superintendent of operations, and, until this promotion, general superintendent.

Mr. Bowie has been with Western Gas Service for 23 years. He started as a serviceman-meter reader, and later became a head of service and construction crews, a superintendent in charge of operations and construction, a superintendent of construction and maintenance, and assistant general superintendent.

Colorado Interstate promotes King, Pelican, Yeonopolus

TWO NEW VICE-PRESIDENTS and a treasurer have been elected by Colorado Interstate Gas Co.

They are Peter J. King, Jr., vice-president for corporate and financial matters; Thomas L. Pelican, vice-president for engineering; and John J. Yeonopolus, treasurer.

Mr. Yeonopolus succeeds William B. Kice, who retired at the end of last year.

Mr. King joined Colorado Interstate in 1953. He has been administrative assistant to the president. Before that, he was employed by the United States Atomic Energy Commission at Portsmouth, Ohio.

Mr. Pelican has been in charge of Colorado Interstate's industrial engineering department since 1953. He joined the firm as a gas en-



Peter J. King, Jr.



Thomas L. Pelican



John J. Yeonopolus

gineer in 1948. Prior to that, he was associated with Natural Gas Pipeline Co. of America and Texoma Natural Gas Co.

Mr. Yeonopolus joined the company's accounting department in 1941. He became a rate accountant in 1951, manager of rate accounting in 1953, and director of budget and rates in 1957.

Messrs. Pelican and Yeonopolus are members of A. G. A.

K. W. Hasbrouck promoted

KENNETH W. HASBROUCK has been elected assistant vice-president of New York State Electric and Gas Corp. He will be manager of the company's rates and regulatory department, and will assume the duties of the late William J. Foster, Jr. Mr. Hasbrouck joined the firm in 1926. During the past 27 years, he has been in charge of the preparation of rate and special contract filings with the Public Service Commission and has testified before both that group and the Federal Power Commission in cases relating to rates and franchises, and on the company's conversions from manufactured to natural gas.

Gellert named president

NATHAN H. GELLERT, JR., has been appointed president and general manager of Hood Northwest Sheet Metal Co., subsidiary of Hood Construction Co. Mr. Gellert was president of Spokane Natural Gas Co. until its merger with Washington Water Power Co. last year. He is a member of A. G. A., and a past chairman of the Pacific Coast Gas Association's technical section.

Helix elects Merriam president, names other officers

JOHN F. MERRIAM, president, Northern Natural Gas Co., has been elected president of the newly formed Helix Co. Helix was recently organized to extract helium from natural gas by Northern Natural and Air Products, Inc., Allentown, Pa. Helix plans to build a \$13.5 million extraction and purification plant near Sunray, Texas.

Other officers of the new company are M. L. Mead, senior vice-president; F. C.

Nicholson, vice-president; W. H. Thomas, vice-president of sales; B. H. Harper, secretary; and H. H. Siert, treasurer. Mr. Thomas is associated with Air Products; the other new officers are connected with Northern Natural.

Directors of Helix include Mr. Merriam, Mr. Mead, A. B. Dilworth of Northern Natural, and Leonard Pool and Edward Donley of Air Products.

Harry C. Walton retires

HARRY C. WALTON, industrial and sales engineer, Commonwealth Natural Gas Corp., has retired after 40 years in the industry. He joined Commonwealth in 1952. Before that, he was associated with the former Louisiana Gas Co. and a number of exploration, drilling and distribution companies in Louisiana, Texas, Kansas, Oklahoma and Tennessee.



William J. Foster, Jr.

vice-president, New York State Electric and Gas Corp., died Jan. 18 after a short illness.

Mr. Foster, who had been in charge of the company's rate and regulatory matters, was a well known authority on public utility regulations, rates, franchises, valuation, and depreciation.

Mr. Foster joined Adirondack Power and Light Corp., predecessor of Niagara Mohawk Power Corp., in 1921. In 1922, he was employed on a joint project by Southern New York Power and Railway Corp. and Richmond Light and Railroad Corp.

In 1923, he joined the firm of Edward J. Cheney, New York City consulting engineer. He became associated with New York State Electric and Gas in 1942.

Since that date, Mr. Foster represented many utility companies besides his own in rate and regulatory cases before public service commissions throughout the country.

Mr. Foster was his company's official representative to A. G. A. He was also a past chairman of the Association's Depreciation Ac-

counting Committee, and a member of several other committees. In addition, he was a member of the Empire State Gas and Electric Association's rate committee.

Mr. Foster is survived by his widow, Ruth, three sons, one daughter, four grandchildren, and his mother.

George H. Clifford

retired chairman of the board of Stone and Webster Service Corp., died Feb. 2 after a brief illness. He was 77.

Mr. Clifford began his utility career in 1901 with Northern Texas Traction Co., Fort Worth. Shortly thereafter, he became secretary-treasurer. He was named general superintendent in 1906, and general manager in 1910. He was subsequently elected vice-president.

In 1925, he joined Stone and Webster as district manager of its Southwest properties. He became division manager in Boston in 1927.

In 1929, when Stone and Webster, Inc., created the service corporation to handle consulting and advisory services, Mr. Clifford was named president. He served as the subsidiary's board chairman from 1953 until 1956, when he retired.

In addition, Mr. Clifford was a vice-president and director of Stone and Webster.

Mr. Clifford is survived by his widow, Irene, and two sisters.

Ellis L. Phillips

former president and chairman of the board of Long Island Lighting Co., died Jan. 29. He was 85. Mr. Phillips was also president of E. L. Phillips and Co., New York City consulting engineers.

Mr. Phillips was Long Island Lighting's first general manager. He became president in 1911. In 1937, he was elected chairman of the board, the post he held until 1945.

A well known philanthropist, Mr. Phillips was president of the Ellis L. Phillips Foundation.

In addition, he was president of the Eastern Seaboard Securities Corp., and a member of the American Society of Mechanical Engineers, the American Institute of Electrical Engineers, and the American Society of Refrigerating Engineers.

Survivors include his widow, Kathryn, son, a daughter, a sister, and eight grandchildren.

Donald P. Pigott

secretary and purchasing agent, Consolidated Brass Co., Charlotte, N. C., died recently after a heart attack.

Mr. Pigott joined Consolidated Brass in 1935. He held positions in the shipping and time study and cost departments, and subsequently was promoted to purchasing agent and secretary.

Mr. Pigott is survived by his widow and five daughters.

Names in the news—a roundup of promotions and appointments

UTILITY

Walter E. McWilliams has been named assistant general sales manager of The Peoples Natural Gas Co. He joined the company 30 years ago, and was appointed industrial sales manager in 1953. William R. Gartz has been promoted to industrial sales manager. He joined the firm 12 years ago. Mr. Gartz is chairman of A. G. A.'s Ferrous Metals Subcommittee.

John B. DuBois, assistant advertising manager, Southern California Gas Co., has been assigned additional duties as primary company contact on all advertising agency matters. He started with the firm in 1954.

Union Gas Co. has announced three personnel changes. Gavin H. D. Martin has been named operations manager, Edward D. Learoyd has been promoted to chief engineer, and Ted P. Karry has been appointed supervisor of public information. Mr. Martin joined the company in 1948, and became chief engineer in 1953. Mr. Learoyd was first associated with Union Gas in 1951. He was named assistant to the chief engineer in 1953. Mr. Karry started with the firm in 1954, and was appointed editor of publications in 1957.

L. C. Peschel, controller, Mountain Fuel Supply Co., has been elected to the firm's board of directors. He replaces L. Clyde Olpin, who has resigned. Mr. Peschel joined the company in 1920.

William J. Fountain has been named attorney for Consolidated Natural Gas Co. in the firm's New York office. Mr. Fountain has been engaged previously in legal work

for the Consolidated system.

Philip C. Beals and Frank L. Harrington have been elected to the board of directors of Worcester Gas Light Co. Mr. Beals is executive vice-president and treasurer of Vellumoid Co. of Worcester. Mr. Harrington is president of both the Massachusetts Protective Association and the Paul Revere Life Insurance Co.

G. Stockton Strawbridge has been elected to the board of directors of Philadelphia Electric Co. He replaces Charles S. Redding, who died recently. Mr. Strawbridge is president and general manager of Strawbridge and Clothier of Philadelphia.

Several personnel changes have been announced by The Ohio Fuel Gas Co. Karl E. Gorham has been promoted to superintendent of the southern production division. He joined the firm in 1924, and was named district foreman of the division in 1956. Daniel L. Cronin has been appointed Oberlin local agent. He succeeds M. E. Vernon, who was recently promoted to Sandusky local manager. Mr. Cronin, who joined the company in 1957, became Toledo district dealer sales manager in 1958.

James A. Lewis and John W. Rutland, Jr., have been elected to the board of directors of Republic Natural Gas Co. Mr. Lewis is president of James A. Lewis Engineering, Inc. Mr. Rutland is a senior partner in the Dallas, Texas, law firm of Thompson, Knight, Wright and Simmons. In addition, Jack R. Fraser has been named vice-president of Republic Natural Gas. Mr. Fraser was formerly manager of the gas department.

MANUFACTURER

William T. Brent has been appointed manager of the wholesale division of Temco, Inc. Mr. Brent, who joined the firm six years ago, has served as a district manager and sales promotion manager.

Fred Stevenson, Sr., has been named Southeastern sales representative for The Cleveland Heater Co.'s line of Rex water heaters.

William E. Wolcott has been appointed a district manager for Norge home appliance division of Borg-Warner Corp. His territory will include Michigan and northern Ohio and Indiana. He was previously general sales manager of Ramsey Bennett Co., Cleveland appliance distributor. In another development, Mrs. Glenna Pierce has been promoted to utility representative for the home service department. She has been a staff home economist for the past four years.

Richard F. Cleary, vice-president and general manager, Strait and Richards, Inc., has retired after 33 years with the firm. Mr. Cleary was his company's delegate to the Gas Appliance Manufacturers Association for several years. He was also a GAMA director, chairman of the group's direct heating division, and a member of its exhibit committee. John D. Crowley has been named to replace Mr. Cleary as vice-president and general manager. Earlier this year, Charles J. Barkhorn succeeded Andrew MacKechnie, Jr., as president.

Clyde H. Slease, assistant to the president, and counsel for Dravo Corp., has been



1959

MAY

- 3-6 •LPGA Annual Meeting, Conrad Hilton Hotel, Chicago, Ill.
- 5-7 •Research and Utilization Conference, Hotel Carter, Cleveland, Ohio.
- 11-12 •A. G. A. Eastern Gas Sales Conference, The Netherland-Hilton Hotel, Cincinnati, Ohio.
- 18-19 •Operating Section Transmission Conference, Statler-Hilton Hotel, Dallas, Texas.
- 18-20 •A. G. A. Mid-West Regional Gas Sales Conference, Edgewater Beach Hotel, Chicago, Ill.
- 19-21 •Pennsylvania Gas Association, Pocono Manor Inn, Pocono Manor, Pa.
- 20 •The Metropolitan Gas Heating & Air Conditioning Council, A. G. A. Headquarters, New York, N. Y.
- 21-22 •The Natural Gas and Petroleum Association of Canada, Hamilton, Ontario.
- 25-27 •Operating Section Production Conference, Hotel Sheraton, Rochester, N. Y.

JUNE

- 7-11 •American Society of Heating and Air Conditioning Engineers, Semi-annual Meeting, Vancouver, B. C.
- 11-12 •Accounting Section Managing Committee Meeting, The Homestead, Hot Springs, Va.
- 15-16 •A. G. A. National Public Relations Conference, Edgewater Beach Hotel, Chicago, Ill.
- 22-23 •Michigan Gas Association, Grand Hotel, Mackinac Island, Mich.
- 22-24 •American Society of Refrigerating Engineers, Annual Meeting, Lake Placid Club, Lake Placid, N. Y.
- 22-25 •Canadian Gas Association, Annual Meeting, Empress Hotel, Victoria, Canada.

JULY

- 20-24 •Western Summer Radio-Television and Appliance Market, Western Merchandise Mart, San Francisco, Calif.

AUGUST

- 9-13 •American School Food Service Association, Civic Auditorium, Brooks Hall, San Francisco, Calif.
- 24-28 •The American Dietetic Association, Los Angeles, Calif.
- 26-28 •Mid-West Gas Association, Gas School and Conference, Iowa State College, Ames, Iowa.

transferred to Washington, D. C., where he will coordinate sales activities and handle liaison with government agencies. He joined Dravo in 1948.

Two personnel changes have been announced by Robertshaw-Fulton Controls Co. D. Rex Scott has been named assistant general manager of the Western research center. He joined the company in 1950, and was previously director of planning. John E. Daugherty has been appointed sales manager of the international department. He started with the firm in 1949, and became export sales engineer in the department in 1955.

Jack B. Laramy has been promoted to manager of sales of Worthington Corp. He joined the firm in 1929, and served for the past three years as assistant manager of the marketing division and Eastern regional sales manager.

Robert M. Johnson has been named Western regional manager of General Controls Co. For the past six years, he has been Los Angeles branch manager for the company.

The Maytag Co. has announced several personnel changes. Raymond V. Hahn, Sr., has been elected president of The Maytag West Coast Co. He joined the firm in 1928, and served for the past year as vice-president and general manager. At the same time, Raymond Hahn, Jr., was named to the newly created post of vice-president and general sales manager. He started with the company in 1946, and became southern division sales manager a year ago. In another development, Frank R. Smith has been appointed regional manager in The Maytag Co.'s Newark, N. J., branch. He was formerly an appliance sales representative for Philco Corp. Jack H. Davis has been promoted to regional manager in the company's Chicago branch. He joined the firm in 1954,

and became field sales assistant in Chicago in 1957.

Willard F. Rockwell, Jr., president, Rockwell Manufacturing Co., has been named to head a heavy machinery industry committee for fund-raising for the purpose of disseminating information on foreign policy to the public. This citizen education campaign will be sponsored by the Foreign Policy Association, Inc.

OTHER

The National LP-Gas Council has appointed two new committee chairmen. A. E. Moore, president of Dri-Gas Co., division of Warren Petroleum Corp., has been named chairman of the dealer sales aid committee. John G. Guardioli, manager of advertising and sales promotion for Propane Corp., has become chairman of the public relations committee. In another development, Richard H. Pollard has been appointed Western regional manager of the Council. He was previously associated with Alderman Enterprises, Inc., San Francisco public relations firm.

D. E. O'Connor and T. J. Merritt have joined the Houston, Texas, engineering department of Commonwealth Services, Inc. Mr. O'Connor will be chief engineer. Mr. Merritt will be in charge of industrial engineering. Mr. O'Connor was previously chief engineer of the engine division of Clinton Engines Corp. Mr. Merritt was formerly machine tool division general manager for Clinton Engines.

Charles L. Hulswit, president and director of Orange and Rockland Utilities, Inc., Nyack, N. Y., has been elected to the board of directors of Dynamics Corp. of America. He replaces David T. Bonner, who died recently.

THE 1959 A. G. A. Membership List has been sent to all members of the Association. Members are urged to check their listings and notify A. G. A. of any changes, so that the list can be kept up to date for the next edition. All changes must be received before Oct. 30,

1959, for inclusion in the 1960 Membership List. Clip and use the form printed below for submitting changes.

Note: In reporting company membership changes, delegates may use the first line of the form for their listing.

American Gas Association
Attention: Membership Secretary
420 Lexington Avenue
New York 17, N. Y.

This is to report a change in listing for:

Company Membership

Individual Membership

Check one

Name first middle last

Company

Company Address

..... city zone state

Position

Address for Mail
(If other than above) city zone state

(Please indicate if Personal or Company)

Personnel service

SERVICES OFFERED

Labor Relations Director—nine years varied experience with utilities as representative of national unions; negotiating contracts, processing grievances before arbitration boards, unfair labor charges before NLRB, job evaluation analysis, writing contract clauses. Married, age 41. Resume on request. 1943.

Executive—17 years experience in management, sales, accounting, and engineering—as director, vice-president, and general manager and other capacities in natural gas utilities. My services are now available as a management adviser or other related capacities. 1944.

Management Operation Planning—recent president 12,000 meter natural gas utility. Nineteen years general management, distribution, utilization, rate making, finance. Graduate of leading eastern university. Will relocate. Living in West. Married, two children, age 43. 1945.

Industrial Gas Engineer—10 years of diversified experience in industrial gas engineering. Also qualified in commercial heating, water heating and domestic appliances. Desires greater responsibility and opportunity in expanding company. 1946.

Sales Manager—strong utility background, basically trained in residential sales of both gas and electrical appliances. Twenty years experience with top name appliance manufacturers. Product specialist, district, and regional sales manager. Traveled entire Eastern U. S., supervising and developing distributors, and dealers. Good dealer coordinator field merchandising man, highly promotional, with good contacts. Immediately available. Salary open. 1947.

Sales Engineer—have had 22 years experience as regional sales representative for well known heating equipment manufacturer recently gone out of business. Good record of success in sale of space heaters and unit

heaters to utilities, distributors and dealers. Details upon request. 1948.

Attorney—former executive manager bulk station, with public relations and sales experience. Until recently specialized oil and gas law. Prefer New York area, but will consider other. Salary secondary to opportunity. Resume on request. 1949.

Sales Executive—20 years with large, aggressive utility and five years with gas heating manufacturer. Background of retail and dealer sales and promotion. Thoroughly familiar with problems of selling all gas appliances through planned sales campaigns. Extensive experience in developing manufacturer, distributor, and dealer participation in mass sales programs. 1950.

Administrative Officer—interested in relocating, desires position in management or operations of utility. Prefer central, west or southwest states but would consider other locations. Broad experience in all phases of gas utility operation. Excellent record, references and resume on request. Available 30 days. 1951.

Pakistani wishes position as apprentice to learn of United States natural gas company operation. Educated at the University of Punjab with courses in gas technology; Westminster Technical College, London; and completed examinations in gas technology (Parts I and II) of City and Guilds of London. 1952.

Sales Manager—broad experience in planning and assisting in setting marketing policies and strategy; planning, preparing and executing sales programs; supervision of and contact with district managers and distributors on national basis; merchandising; pricing and sales promotion. Experience also covers managing wholesale salesmen; salesmen's compensation plans; sales training; sales presentations; advertising—national and local; sales promotion; direct mail and copywriting. Married. Will re-locate. 1953.

Executive—ability to interest associates in performing their tasks more enthusiastically and

energetically. Good organizer. Twenty-two years of varied experience in management, public relations, public speaking, advertising, sales, accounting and operation of natural gas and combination properties. 1954.

POSITIONS OPEN

Sales Representative—Gas Odorants—for leading company in field. Full time travel, commission basis, established territory. Experience in gas distribution, operations. Engineering degree desirable. Send complete resume, including salary requirements, and recent photograph. 0886.

Assistant Superintendent, Gas Distribution—with experience in maintenance, design, construction and operation of services and mains. Working knowledge of regulator control equipment required. Technical training preferred. Four hundred miles of pipeline. Location, Eastern Pennsylvania. 0887.

Gas Engineer—consulting firm has opening for graduate mechanical engineer with five to ten years experience in gas industry. Work will provide broad experience in all phases of business. Send resume of education, experience and salary expected. All replies held confidential. 0888.

Manager—Gas Property Pennsylvania—Eastern Pennsylvania utility has openings for managers. Experience in operation and distribution necessary. In reply please state age, education and experience. 0889.

Industrial Gas Engineer—nationally organized consulting firm needs gas engineer under 40 with diversified experience in the sale of industrial and large commercial gas applications. Familiarity with industrial service work desired. Excellent opportunity for advancement. Salary open. Send complete resume of vocational and personal history. 0890.

Edison's home town lit by gas—even during Electrical Week

FEB. 9-15 was national electrical week. The observance was supposed to honor the father of electricity, Thomas A. Edison, and thereby "enhance public appreciation of electricity."

But, while Edison may be honored all over the globe where electric lights shine, West Orange, N. J., his old home town, still sticks to gas, thank you!

When Edison invented the electric bulb in 1879, it seemed to insure the prompt downfall of the old-fashioned gas mantle. But electricity still has not invaded the streets of West Orange's Llewellyn Park section, where the inventor lived for almost half a century, and whose streets continue to be lit by dozens of gas lamps.

In fact, gas lamps stand right out in front of Edison's home and are sprinkled through other streets in this area, too.

There is little chance that Llewellyn Park will switch to electric. "We don't want electric street lights," said Henry T. Stetson, chairman of the board of managers of the Llewellyn Park Association. "We have enough overhead wires as it is."

The old gas mantles are tended by the Welsbach Street Lighting Corp. of New York, which also makes electric traffic signals. The company doesn't have to send out lamp-

lighters every evening to turn the lights on. However, it does send out men who go from lamp to lamp, climb a ladder and wind the clock which automatically turns each gas light off and on.

The company's local superintendent said the lamps near Edison's home have been burning gas since 1916. Before that, naphtha

was burned in the same street fixtures.

Only once a year do Edison's former neighbors relent and allow an electric light to shine in their streets. This happens each Feb. 11, Edison's birthday. On that day, they turn on an electric bulb to illuminate a bronze plaque in Llewellyn Park, commemorating the illustrious inventor.

Whaddya mean 'it's not nice'?

Gadgets never seem to work in the house where Thomas A. Edison once slept.

"I sure could use that man now," says Mrs. Andy Pruett of Louisville, Ky., ticking off a list of things to be repaired.

"We'd have him put in some wall plugs 'cause we don't have any . . . fix our radio . . . get the phonograph working," she says.

Andy, her husband, "isn't handy around the house."

The Pruett's are aware of their home's

historical background: Edison boarded there more than 90 years ago.

Since Feb. 11 was Edison's birthday, the Pruett's planned something special, as a celebration.

"We thought of lighting up all eight of our lamps . . . but we have only three outlets—all from the ceiling," Mrs. Pruett says. Instead, she decided to cook a chicken dinner for a friend.

"I know it wasn't a nice thing to do," she explains, "but I cooked the meal with gas."

A.G.A. advisory council

E. R. ACKER.....Poughkeepsie, N. Y.
B. C. ADAMS.....Kansas City, Mo.
J. B. BALMER.....New York, N. Y.
F. M. BANKS.....Los Angeles, Calif.
L. L. BAXTER.....Fayetteville, Ark.
D. B. W. BROWN.....New York, N. Y.
A. G. BUR.....Green Bay, Wis.
F. D. CAMPBELL.....Cambridge, Mass.
STUART COOPER.....Wilmington, Del.
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